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The proposed changes in curriculum at Franklin and Marshall were considered in the light of what would strengthen and unify the curriculum in accordance with their concept of the liberal arts college, rather than to introduce greater diversification or to suggest venturing into areas which are the province of other kinds of institutions. Presents a total of 14 specific recommendations proposed by the committee and the reasoning behind these recommendations. Tabulations and basic work papers are supplied in an extensive appendix.

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A NEW CURRICULUM

for

FRANKLIN AND MARSHALL COLLEGE

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Report of the
Curriculum Planning Committee

Lancaster, Pennsylvania
February, 1959

A NEW CURRICULUM

for

FRANKLIN AND MARSHALL COLLEGE

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Curriculum Planning Committee

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PREFACE

The present study of the curriculum of Franklin and Marshall College began with the recommendation by the Academic Council, in the spring of 1956, that an *ad hoc* committee be appointed to study certain curricular questions, including the broad one of "defining more precisely and in modern terms the educational aims of the College and making the curriculum serve these ends more directly." Dean J. M. Darlington accordingly appointed a Curriculum Study Committee consisting of Professors John B. Noss and Donald W. Prakken from the Division of Humanities, Richard M. Foose and Donald W. Western from the Division of Natural Sciences and Mathematics, Winthrop Everett and Paul L. Whitely from the Division of Social Sciences, and Albert L. Bell from the Division of Economics and Business Administration. Dean Darlington served as Chairman of the Committee and President William W. Hall as a member *ex officio*. This Committee began its survey in the fall of 1956, and has continued active to the present. It has met frequently — on the average at least once a week during term time — and for long hours. Four of the original members are still on the Committee; Professor Noss was replaced by Professor Luther J. Binkley, Professor Foose by Professor John H. Moss, and Professor Western by Professor Frederick H. Suydam, who was in turn replaced by Professor Richard

I. Weller. When Dr. Frederick deW. Bolman, Jr. replaced Dr. Hall as President, he became a member ex officio.

The principal task completed by the Curriculum Study Committee between October 1956 and December 1957 was a review of the general college requirements, in the course of which it interviewed the members of all departments offering courses meeting general requirements. Its extensive minutes were summarized by Professor Binkley, and the summary was distributed to all members of the Faculty and Board of Trustees early in February 1958. Meanwhile the Board of Trustees had appropriated funds for conducting a more intensive study to culminate in a plan for a new curriculum. Although the Curriculum Study Committee was to continue to supervise the study, the principal work was to be done by a Curriculum Planning Committee of three, one of whom was to be released from all teaching duties for a year and the other two put on half teaching load for the same period. President Bolman appointed this committee in December 1957, and it began work in January 1958.

The Curriculum Committees have drawn upon many sources for ideas and information. First and foremost has been the Faculty of Franklin and Marshall College, all of whose members have at one time or another been involved in our deliberations. Several meetings were held with students and one with a group of Trustees. A questionnaire was sent to all members of the class of 1955, as a representative group of recent alumni. The catalogs and curriculum study reports of many other colleges have been studied. In certain special fields, experts of national reputation have been called to the campus as consultants.* Members of the Committees have visited other colleges in search of answers to specific questions. Some of the material gathered in these ways is presented in the appendices to the present report.

At every stage of its work the Curriculum Planning Committee has met with the Curriculum Study Committee and followed its guidance. For this reason, this report, though prepared by the Curriculum Planning Committee, is a joint report of both Committees and has the endorsement of both. During the last stages of planning, the two Curriculum Committees met jointly with the Academic Council, which approved the substance of what is presented here. It is thus appropriate that this report go forward to the Faculty for its consideration and ultimate action.

15 January 1959 CURRICULUM PLANNING COMMITTEE

W. Nelson Francis, Chairman
Richard F. Schier
Donald W. Western

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* For a list of these consultants and biographical information about them, see Appendix A.

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I. INTRODUCTION

LIBERAL EDUCATION AND THE CURRICULUM

The curriculum outlined on the following pages is based on the assumption that Franklin and Marshall is to be a liberal arts college. The Curriculum Committees have therefore considered that their mission was to propose changes which would strengthen and unify the curriculum in the light of their concept of the function of the liberal arts college, rather than to introduce greater diversification or suggest venturing into areas which are the province of other kinds of institutions.

Considered in the broadest sense, a curriculum is a course of study planned and organized with the aim of leading the student to a given educational objective. It is the bare diagram of an education, with the vital parts — the student, the teacher, the books, the physical and intellectual environment — left out. Its function is to allow these vital parts to interact efficiently so that the student is brought as far along the road to the chosen educational goal as his ability and desire, the skill and experience of his teachers, the physical resources of the institution, and the available time make possible.

A good curriculum does not guarantee an education, nor does a bad curriculum make one impossible. A good curriculum simply facilitates and encourages the educational purposes for which it is designed, while a bad curriculum obstructs and frustrates them. Throughout their work, the Curriculum Committees have tried never to lose sight of their primary aim: to plan a curriculum which will make the best possible use of the physical plant and human resources at our disposal in order to help our students as far along the road to a truly liberal education as they are capable of traveling within the time available. Since this time is limited and the amount of human knowledge, if not of wisdom, is expanding almost explosively in our time, this has involved much contriving and balancing of alternatives. Most often our choice has had to be not between the good and the bad, but between alternatives almost equally good. Much deliberation, discussion, and consultation lie behind all of the choices we have made. The fact that virtually every decision incorporated in the recommendations that follow is the result of unanimous agreement within the Curriculum Planning Committee, and at least a majority agreement within the Curriculum Study Committee, leads us to have confidence that our decisions are not unsound.

When the faculty of an engineering college or of a medical school considers its curriculum, the question it must answer first of all is "What kind of engineers, or doctors, do we want our graduates to be?" But when the faculty of a liberal arts college goes through this process, it must first ask the question "What kind of people do we want our graduates to be?" Of course, the liberal arts college is concerned about the occupational competence of its graduates; it intends them to be good doctors, lawyers, business men, teachers, clergymen, or whatever. But it is satisfied in most cases to leave specific training to other, more specialized agencies, and to concentrate its attention on the development of the whole man, so that he can enter adult life in all its phases with understanding and good will. This, in turn, means that it focuses on the individual student. After all, a liberal education is the education of one person, whose fulfilment, both as an individual and as a member of society, is dependent on the unimpeded realization of his unique capacities.

First of all, a liberal education should help the student to attain as complete an understanding of self as all the knowledge of past and present makes possible. The Socratic maxim, "Know thyself," now only faintly visible on the faded walls of Goethean Hall, is still the beginning of wisdom. Secondly, a liberal education should provide an appreciation of the complex relationships of the self to others. No man, whatever his inward resources, lives to himself alone, and the young men of the present generation must go forth as potential citizens of the world. Thirdly, a liberal education should provide for an adequate understanding of the interplay between the self and the physical world. In an age when control over the physical environment has attained dimensions undreamed of by the men of only a few generations ago, no man is liberally educated who does not understand how that control has been gained and how it is to be extended. Fourthly, a liberal education should help the student to establish for himself a code of values by which to live. Never before in history has power without responsibility been more dangerous; never before has power been so easy to attain and moral responsibility so difficult to see clearly. Finally, a liberal education must provide training in the skills and methods which are needed both to acquire a liberal education and to make it effective. This is primarily the function of preparatory education, but the liberal arts college must be ready to remedy the mistakes and supply the deficiencies in the preparation of its students, as well as to augment it, in some cases at least, by further training.

When we survey the traditional academic disciplines, we find that virtually every one of them has something to contribute to one or more of these five inescapable responsibilities of the liberal arts college. The understanding of self is to be attained variously through the study of psychology, of religion, and of literature and the arts. The relation of the individual self to others is studied from different viewpoints by history, sociology, anthropology, economics, political science, philosophy, literature, and religion. Study of the relationship between the self and the physical world begins with biology and psychology, and extends out to chemistry, physics, geology, and astronomy. An enlightened code of values, however personal, derives from a knowledge of history, ethics, religion, and literature. The basic skills of acquiring, correlating, and expressing knowledge are learned in the laboratory and library, and in courses in rhetoric, logic, mathematics, and foreign languages.

The four years which our society allots to this stage of education is manifestly too short a time for each individual to go very far into all these subjects. The wisest course seems to be to expose him to enough of them to help him to the attainment of the five kinds of knowledge we have named, and to require him to study one of them in greater detail. This concentrated study of a chosen subject should carry him to an understanding of its general principles and methods of investigation, and should furnish him with some knowledge of the main categories of information these methods have accumulated. The curriculum here recommended attempts to strike a balance between breadth of exposure and depth of concentration and thus to avoid the opposing errors of dilettantism and narrow specialization.

II. THE FRAMEWORK OF THE CURRICULUM

1. Premises

Before we can proceed to a discussion of required courses, major programs, and all the other matters which constitute the content of the curriculum, we must first establish its mechanics. This is primarily an answer to the question, "How and where shall the student spend his time?" The business of learning goes on variously in classroom, laboratory, library, private study, public lecture, dormitory or fraternity bull session, and individual conference — not to mention glee club or drama rehearsal, athletic field, or summer job. The relative importance of all of these in the total scheme of the student's college education is to a large degree set by the mechanical provisions made for the disposition of his time. The length and number of terms, the number of class periods, the length and spacing of vacations, the number, length, and timing of examinations, the number of different subjects studied at any one time — all these mechanical details influence the progress of a student's education in many important ways.

There is no standard pattern by which these things are traditionally arranged. Without going outside the United States one may find semester, quarter, and trimester calendars, course patterns ranging from one to eight at a time, and all kinds of variations on the tutorial, preceptorial, seminar, and independent study ideas. This seems to be a time of considerable experimentation in these matters; old-established liberal arts colleges such as Dartmouth, Oberlin, and Carleton are planning or trying out new calendars, and more radical innovations are contemplated or in effect at newer and more experimental institutions like Sarah Lawrence and Hofstra. This suggested to the Curriculum Committees that we could well begin our deliberations by examining the framework of the curriculum to see whether it meets the needs of our students with maximum adaptability.

The members of the two Committees were virtually unanimous in feeling some dissatisfaction with our present system. Certain fundamental arrangements, however, seemed to be satisfactory at least for the present, although the strains which the next ten years may impose on our educational system may very well indicate a re-examination even of these fundamentals. Among these are the following:

1. The four-year baccalaureate program. While certain of our students are capable of acceleration that may permit them to attain the bachelor's degree in less than four years, especially if they make use of the summers, most students need the full four years. Those students who must support themselves by outside work should be allowed more time; a recommendation on this point will be presented below. It is also possible that in certain fields the requirements of a broad liberal education and those of undergraduate specialization cannot much longer be met in a normal four-year program. In these cases it is possible that in the near future we shall have to provide either for required

summer work or a fifth year.

2. The long summer vacation. The various calendars considered by the Committees all provided for a summer vacation extending from early or middle June to middle September, with an independent summer school occupying most of this period. Many of our students are dependent on summer jobs to earn enough to help them through the regular academic year. Primarily for this reason, the Committees felt it unwise to recommend making regular use of the summer for academic purposes. Again the pressures of the next few years may require a reversal of this position. For the present, however, the summers can best be left free for jobs or, in the case of accelerating students or those with deficiencies, voluntary summer school.

3. The fact that college work is a full-time occupation. This is, perhaps, not so firmly established a premise of our present curriculum as it might be. The Committees made no study of the average amount of time our students spend on outside jobs, major extracurricular activities, and week-end trips. But they had sufficient informal evidence from individual cases and general subjective impressions to be aware that for many of our students college work under the present curriculum is a part-time occupation. Nevertheless, we have proceeded on the assumption that we may reasonably expect a 48-hour work week from the average student. A recommended five-year program for those who must spend more than twelve hours a week at outside work will be presented below.

4. The varied course program. Unlike the system in effect at many European universities, where the student studies or "reads" a single subject, the American tradition provides for studying several subjects or courses at the same time. At least during the period of general liberal education — roughly the first two or two and a half years — this seems not only sound but necessary. In the period of specialization some arrangements may be desirable which group all the work of a term into a single organized whole, such as practice teaching or a geology field course. But these are exceptions which should be worked out by the departments concerned within the normal multi-course framework.

5. Periodic examination and accumulated credit. Again unlike some European systems, in which the receiving of a degree depends almost wholly upon successful performance in a single set of examinations taken at the end of the period of residence, the American tradition is strongly in favor of progress toward the degree by a series of discrete courses, separately examined and graded, with successful performance in an established number a requisite for graduation. Although we recommend a major simplification in this process, we do not feel that it should be abandoned.

6. The comprehensive examination in the major field. While the separate course examination seems at present the best instrument for measuring success in the varied courses that constitute the broad general phase of liberal education, it leaves a good deal to be desired

as a measure of the education in depth that is the purpose of the major. For this reason, the Committees believe that the comprehensive examination at the end of the senior year should be retained without change.

The Committees are agreed that these matters should stand unchanged for the present, though any or all of them may come up for re-examination in the near future. But the Committees also agree that certain changes should be made in the basic framework of the curriculum. They are presented in the following sections of this chapter.

2. The Course as the Unit of Credit

Under the system at present in effect, the unit of credit is the "semester hour." This is roughly equal to one "contact hour" per week for sixteen weeks. The "contact hour," in turn, is roughly equal to a continuous period of fifty minutes in classroom or laboratory in the presence of an instructor. There are exceptions to both of these equivalences. Thus in some courses, such as those in expository and creative writing, the value of a course in semester hours is larger than the number of contact hours it meets each week. In others, notably the laboratory sciences, the reverse is true. These variations seem to be based on a minimal recognition of the fact that various kinds of class activity differ widely in their demands on the student and instructor and in their contribution to the total experience of a course. But the general assumption still stands: that an hour a week for sixteen weeks in the presence of a member of the faculty constitutes a standard unit of measure upon which academic bookkeeping can be based. Since we have courses ranging from one to nine semester hours in value, there is in our present curriculum a tremendous variety of implications of the term "course."

The Committees believe that this system, in addition to being cumbersome and complex, actually encourages a false sense of values in students and not infrequently involves them in unnecessarily difficult academic situations, such as taking six courses at one time, or falling short of graduation requirements by one or two hours. [Since the subject matter that we teach is organized into courses, which are self-contained units of instruction separately examined and graded, we feel that these, rather than the arbitrary and abstract semester hour, should be the units of credit and accomplishment. This means that all courses should have equal importance in the accumulation of credits toward a degree, and hence in the eyes of faculty and students. It further implies that all courses should be equally privileged in the demands they make upon the time and attention of the average student. This does not mean, it hardly need be said, that students will be expected to schedule their study hours by time clock, nor that they will have the same number of contact hours in each course, regardless of subject and level. Individual differences among students, instructors, and subjects render such mathematical egalitarianism undesirable. It does mean, however, that in making out student schedules and in totting up academic accomplishment a course is a course, regardless of its content and time schedule. In order to insure rough equivalence among the various courses offered, it will be necessary for the subject-matter of many courses now offered to be recombined in new courses of approximately equal content.

* * *

I. THE COMMITTEES RECOMMEND THAT THE UNIT OF STUDY AND CREDIT BE THE COURSE, TO BE DEFINED AS ONE SUBJECT PURSUED THROUGH A SINGLE SEMESTER AND SEPARATELY EXAMINED AND GRADED.

3. The "4+S" Course Load

The present requirement of 120 semester hours of credit, acquired normally in eight semesters, implies that the expected normal load for the student is 15 semester hours. Students are permitted, however, to take 16 hours without extra charge. The fact that the average number of credits accumulated by the members of the class of 1958 was 127.4 indicates that virtually all students take advantage of this possibility. Furthermore, students who have a 2.0 (C) average in any semester may take 18 hours (upon payment of an extra fee) the next semester, and those who have a 3.0 (B) average may take as many as 21 hours. Since the all-college average is well above 2.0 (2.46 in the second semester, 1957-58), and since the Dean's List, for which a B average is requisite, includes more than 25% of the student body (240 of 1103 on

Dean's List and 58 more on Honors List in the second semester, 1957-58), this means that students of mediocre ability, well below the average, can if they wish take up to 18 hours, and that one-fourth of all students — a group certainly containing more than the outstandingly brilliant — can take 21 hours. This in turn means that a below-average student may be taking six to eight courses and a somewhat above average student as many as nine. It is the feeling of the Curriculum Planning Committee that this state of affairs leads to excessive fragmentation of the student's time and attention, and discourages faculty members from demanding the amount and kind of work characteristic of a liberal arts college of high standing. That this is not merely a subjective impression is borne out by the number of "textbook courses" given here, and by the insufficient use made of our fine library.

What constitutes a sufficient course load depends, of course, on many variables, including the ability of the student, the amount of subject matter treated in a course, and the amount of outside work required. The Curriculum Committees feel that a load of four full courses and one lighter supplementary course (henceforward called an S-course) on the one hand allows for some desirable variety in the individual program, while on the other it permits instructors to expect more outside reading and writing than we now ask of our students. This is in line with the contemporary emphasis on putting upon the student more responsibility for his own education. Assuming that a full-time student, not spending more than twelve hours a week on an outside job, can put in an average work week of forty-eight hours, the 4+S load permits an average of about eleven hours a week per course, as compared with the present assumption of nine hours a week (three in class and six outside) for a three-hour course — an assumption, we feel, not always true in fact. It is to be emphasized that the figure of eleven hours per week per course is merely an average; the wide range of differing abilities among students will mean that their individual study loads will vary greatly. The eleven-hour figure simply supplies a rough indication to the instructor of the amount of time (including contact hours) which he may fairly expect an average student to spend on his course.

The S-Course. In addition to the normal load of four regular courses, all of equal credit value and lasting for a single semester, we propose that each year the student take a supplementary course, which may meet once or twice a week and require two or three hours a week of reading, writing, or other outside activity. These S-courses permit inclusion of certain subjects and modes of study which are better handled in a more deliberate and less concentrated manner than that normal to the full semester course. We propose that the S-courses for the usual four academic years be the following:

Freshman: English composition

Sophomore: Public speaking (one semester)
Use of library, research methods, preparing the research paper (one semester)

(these to be taken in either order)

Junior: Independent reading or study, laboratory project, or other type of special work in the major field.

Senior: Seminar in the major, in preparation for comprehensive examination.

An S-course pursued through a full year is to have the same credit value as a regular course pursued for a semester. Therefore the Public Speaking and Research Methods courses of the sophomore year will be half courses, separately graded. The others will be graded only at the end of the year, though an informational grade may be given at the end of the first semester at the option of the instructor.

It is to be hoped that the S-courses, which will normally use four or five hours a week of the average student's time, will be used rather flexibly to challenge superior students and give them work of a quantity and quality commensurate with their abilities. This will be particularly important in the junior and senior years, when the student is deeply engaged with his major program. But we should not wait until the junior year to identify and single out superior students for special treatment. There should be special sections of the S-courses of the first two years in which more and harder work will be expected.

The weekly schedule. The weekly schedule should be designed to permit the maximum possible flexibility in class hours. While the normal "contact hour" load of a course not involving laboratory would be three class meetings a week, the schedule should be designed to permit certain subjects (some science and mathematics, beginning language) to use four or even five class hours per week, while others (advanced literature, philosophy, social science) might use only two. Provision should also be made for hours that can be used for hour examinations, make-up sessions, or even alternative class meetings when the instructor is required to be away at a regular meeting time. Full use should be made of Saturday morning.

Variations from the 4+S load. Certain very good students should be permitted, under very careful control, to take an extra regular course. The Curriculum Committees feel that, at least during the first few years of the new curriculum, this privilege should be restricted to the student who has a B+ (3.5) average in the preceding semester and has the written recommendation of his adviser (if he is a freshman or sophomore) or the chairman of his major department. It might further be desirable for all such requests to be acted upon by the Committee on Academic Standing. We feel strongly that the establishment of the 4+S pattern in the minds and working habits of both faculty and students should not be jeopardized by too many exceptions, at least during the period of transition.

Since the 4+S load is to be considered a full-time work load for an average student, the Committees feel that a special program, involving a reduced load and using summer school or a fifth year, should be set up for those students who must work more than twelve hours a week at an outside job. Since these students usually need to devote their summers to lucrative employment, the five-year college course should prove to be the more common alternative. Accordingly we propose that a formal program involving eight 3+S semesters and two 4-course semesters be established, and that students who must work more than twelve hours a week be limited to four courses (one of which may be an S-course) in any semester, unless they qualify for an increased load under the terms of the preceding paragraph. The details of the five-year program should be worked out in such a way that students electing it are not handicapped in their extracurricular or social life. During at least the last two of their five years they should be full-fledged members of the class with which they will graduate.

In all cases of departure from the normal 4+S load, the tuition fees should be adjusted equitably. The tuition for a 5+S semester should be 11/9 that for a normal semester, and the tuition for 3+S and 4-course semesters should be respectively 7/9 and 8/9 that for a normal semester.

* * *

II. THE COMMITTEES RECOMMEND THAT THE NORMAL STUDENT LOAD BE ESTABLISHED AS FOUR REGULAR COURSES AND ONE SUPPLEMENTARY COURSE IN ANY ONE SEMESTER. THEY FURTHER RECOMMEND (A) THAT ONLY VERY SUPERIOR STUDENTS BE PERMITTED, UNDER CAREFUL CONTROL, TO TAKE A FIFTH COURSE; (B) THAT STUDENTS WORKING MORE THAN TWELVE HOURS A WEEK BE PERMITTED TO TAKE NO MORE THAN FOUR COURSES, ONE OF WHICH WOULD USUALLY

BE AN S-COURSE, IN ANY SEMESTER UNLESS THEY ARE ELIGIBLE FOR AN EXTRA COURSE UNDER PROVISION (A); (C) THAT A FORMAL FIVE-YEAR PROGRAM BE SET UP FOR WORKING STUDENTS; AND (D) THAT IN ALL CASES OF DEPARTURE FROM A 4+S COURSE LOAD THE TUITION BE ADJUSTED PRO RATA.

4. The Calendar

It is implied in the two preceding recommendations that we continue on a calendar similar to the present one, at least in so far as the two-semester pattern is concerned. This does not mean that the Curriculum Committees are content with the present calendar. Its principal defect — the fact that both semesters are broken into by vacations whose incidence is established by civil and ecclesiastical considerations rather than academic ones — is a very serious one. Particularly in the first semester, when a Christmas vacation of three weeks interrupts the term only ten days or so before final examinations, academic efficiency is seriously impaired. Primarily for this reason, the Committees gave much serious thought to calendar revision. As most of the Faculty must certainly know, our plans went forward for some time on the basis of a three-term calendar, according to which the Christmas and spring vacations would both come between terms, following an examination period. This kind of calendar, common in universities in Europe and in the Middle and Far West of the United States, seems to be on the increase among smaller American colleges, as evidenced by the recent action at Dartmouth and the proposed new curricula at Oberlin, Carleton, and other liberal arts colleges of high standing. It has been in effect at Goucher for twenty-five years. Members of the Curriculum Committees visited Goucher and Dartmouth (both of which are on a three-course, three-term plan) to get first-hand information about the operation of a three-term schedule.

Although our recommendation on this point is a negative one — that the semester system be retained — we feel that our reasons should be stated, especially since considerable interest in the three-term system has been generated on our campus. They are briefly these:

1. The four-course, three-term plan which we tentatively outlined would either impose too heavy a burden on the average student or would fragment the subject-matter of the various fields of study into more and briefer courses than we now have. The flexibility gained by a 48-course program might well be paid for too highly by a lowering of standards or dilution of content.

2. The scheduling of two-term sequences of courses in a three-term calendar presents many problems in a small college with limited staff and classroom space.

3. The three-term plan involves additional administrative expense, since the mechanical routines of registering, examining, giving and recording grades, and checking on academic standing have to be gone

through three times a year instead of twice. While certain innovations, such as preregistration for the full year, could save some time and effort, there would still have to be an increase of personnel in the offices of the Registrar and Recorder. A college with our meagre endowment, if it is to meet other important demands on its limited funds, must keep administrative expense at a minimum.

4. The four-course, three-term plan would probably necessitate an increase in faculty. It seems to lend itself to more, rather than less, faculty responsibility for the student's education, and hence either to an increased teaching load for a faculty of our present size or a larger faculty with the same or lighter load. The former of these alternatives is obviously undesirable and the latter is economically unfeasible.

It is to be noted that only two of these reasons, the second and third, are arguments against the three-term calendar itself. Since the 4+S, two-semester plan here recommended adds up to a total of 32 regular and 4 S-courses in four years, it is readily convertible to the three-course, three-term program now being tried at Dartmouth and proposed at Carleton, since this also adds up to 36 courses in four years. The Curriculum Committees recommend that the Academic Council keep these institutions under examination in case we should wish to follow their lead in the future.

Meanwhile the Committees feel that one or two things can be done within the framework of the present calendar to remove or alleviate its worst defects. We have two specific recommendations:

1. In advanced courses especially, the lecture and class work could be completed before Christmas vacation or at the end of the thirteenth week of the spring semester and the remainder of the semester given over to a formal Reading Period, to be tested on the final examination or in a special report. This would have to be optional with departments, since some subjects do not lend themselves as well as others to this kind of treatment.

2. A period should be set aside in the middle of each semester for midsemester hour examinations. This would to a large extent do away with the "coast and catch-up" rhythm of study at present encouraged by the uncoordinated scheduling of hour examinations. Instructors who prefer to give more examinations in a semester could continue to schedule the additional ones as they see fit, preferably on a weekly quiz basis. But the institution of a midsemester examination period will insure that all students catch up with all courses at least once during the course of the semester.

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III. THE CURRICULUM COMMITTEES RECOMMEND THAT THE SEMESTER CALENDAR BE RETAINED. THEY FURTHER RECOMMEND (A) THAT A FORMAL READING PERIOD, OPTIONAL WITH DEPARTMENTS, BE INSTITUTED AT THE END OF EACH SEMESTER, AND (B) THAT A MIDSEMESTER HOUR EXAMINATION PERIOD BE SCHEDULED EACH SEMESTER.

5. Distribution, Concentration, Electives

In addition to amassing the requisite number of semester credits and quality points, the student under our present system must meet a complicated array of requirements: all-college requirements, divisional requirements, major requirements, and related courses. The Curriculum Committees feel that this situation can be simplified by establishing three categories to which the courses taken by any individual student are to be assigned. Since this is not a classification of the courses per se, but of the function they fulfill in the individual program, many — perhaps most — courses will appear from time to time under different categories, and there will probably be some overlapping in individual programs. The three categories are distribution, concentration, and elective courses.

Distribution courses are those which meet an organized pattern of requirements, including some outright prescriptions and some restricted options, whose purpose is threefold: (1) to make sure that the student is adequately prepared in certain basic accomplishments that are essential to the effective pursuit of academic goals; (2) to insure that the student has at least the foundation of a broad liberal education, involving exposure to the methods and modes of thought, and a modicum of the ideas and facts, characteristic of the several broad fields of knowledge; (3) to introduce the student to new fields of study of which he may be ignorant but which he might find interesting and attractive enough to pursue further, either in elective courses or as a field of concentration. These may be called the "skills," "breadth," and "door-opening" functions of distribution. It is to be hoped that as the secondary schools assume more responsibility for adequate preparation and our admissions become more selective, the first of these will become unnecessary.

Concentration courses are those which meet an organized pattern of requirements, including some outright prescriptions and perhaps some restricted options, whose purpose is twofold: (1) to insure that the student has at least a limited experience of knowledge in depth, during which he forms an intellectual and to some degree social affiliation with a group of faculty members and fellow students for whom a single academic discipline has paramount importance; (2) in certain cases to prepare the student for a specific occupation or for entrance upon a specific course of post-baccalaureate study. The first of these aims is dictated by educational philosophy, the second by realistic expediency. Their relative importance will be variously assessed by faculty members according as they incline to a philosophic ("liberal") view of higher education or a practical ("vocational") one. Most concentration courses will be in a single department, constituting the "major," but other courses outside the major department which it considers necessary (now called "related" courses) are also to be included here.

Elective courses are to be defined as courses meeting neither of these organized patterns of requirements, which the student may take for any of various reasons: (1) because of the desire to follow up a subject which is not that of his main interest but to which he has become attracted in the course of fulfilling distribution requirements; (2) because of the desire to meet some vocational objective without locating his concentration in the relevant area (for instance, science courses for pre-medical students majoring outside the sciences, education courses for prospective secondary-school teachers, or business courses for prospective lawyers and business men); (3) because of the desire to pursue his concentration beyond the minimum concentration requirements set up by his major department; (4) because of any other kind of private, individual bent or interest.

Under the curriculum to be presented below, the 32 regular and 4 S-courses making up a complete college program will be distributed as follows:

Distribution: 15-18 (including two S-courses), depending on the student's preparation in foreign language.

Concentration: 8-18 (including two S-courses), depending on departmental major and related requirements.

Electives: all the rest, or 0-13, depending on the number needed for distribution and concentration.

The normal expectation is that the distribution requirements will be largely met during the first two years, and the concentration requirements during the last two, where most of the elective possibilities (if the field of concentration permits any) will also occur. In some cases concentration may begin as early as the freshman year, so that distribution will perforce have to extend into the junior or even the senior year.

III. DISTRIBUTION

1. The Purposes of Distribution

The three principal reasons for distribution requirements, as they have been stated above, are to prepare the student for work of college standard, to expose him to the principal broad fields of knowledge, and to introduce him to new subjects which he will not normally have encountered in high school. In many educational systems, notably those of England and continental Europe, these responsibilities are met by the preparatory schools and are not considered proper functions of the university. The graduate of public or grammar school, lycee, or gymnasium, when he enters the university, is ready for concentrated work in a single field. His training in the use of his native language and one or more foreign languages and in basic mathematics is complete, and the breadth of study in many fields which constitutes one aspect of his liberal education is pretty well over. Even premedical, pre-theological, and pre-legal work is handled in the secondary schools, since the university student embarks immediately on his study of medicine, theology, or law. Higher education, in short, begins with concentration.

In America, however, this is not the case — at least not typically. The role of the secondary school during the present century has been conceived of primarily as to prepare the majority to enter immediately on a working career, and only secondarily to prepare the minority for further study or to guarantee a broad liberal education. Since only a minority were planning further education, and since prevailing educational philosophy looked with suspicion on special classes or schools for this minority, it has been necessary for the colleges and undergraduate schools of the universities to continue preparatory work and to make some attempt, through various kinds of distribution requirements, to offer a liberal education as well as a special program of concentration. This division of responsibility is recognized by the allotment of a fourth year to the undergraduate program, with a corresponding reduction of the preparatory period, and by setting the standard of accomplishment for the bachelor's degree somewhat lower than it typically is in European universities.

There have been signs recently of a shift in our educational policy. On the one hand, the increasing numbers of high school graduates who go to some sort of college — this year exceeding 50% for the first time — has made preparation for college a much more important function of the high school than it used to be. On the other hand, the prejudice against separating college preparatory students, especially the superior ones, from the average or below-average students in special classes or, in the large cities at least, in separate schools, is much less prevalent. This, in turn, is reflected in the increasing proportion of public high school graduates attending colleges of the first rank. In thirty years the percentage of public school graduates entering Harvard, for instance, has risen from 25% to 50%. It is to be hoped that, as this trend continues, the public high schools, from which Franklin and Marshall will continue to draw the majority of its students, will assume more responsibility for adequate training in the use of English, in foreign language, in mathematics, and in certain basic sciences. Meanwhile, however, deficiencies in these areas must be made up in college, at the same time that the student is acquiring the broad view of the fields of knowledge which is vital to his liberal education. The distribution requirements here recommended are intended to meet these obligations.

2. English Composition

College work, for most students, means moving onto a new level in the use of their native tongue. Skills of reading and writing which are adequate for most high school work and most of the ordinary demands of everyday living will not meet the needs of advanced study. The Curriculum Committees feel that every student, as early as possible in his college career, should have a course in which the skills of reading and writing are developed by extensive practice under close supervision and guidance. The alternative to such a course is to make such practice and guidance an important part of the other courses taken in the freshman year. Some colleges, for the most part those which are able to select an especially well prepared student body, are currently trying this approach. The Curriculum Committees feel, however, that we are not ready for this, and that we should continue with a special course, roughly the equivalent of the present English 11.

One desirable innovation, however, is made possible by the S-courses. It is generally agreed that the whole experience of college work, including the writing of outside papers and essay examinations for various courses as well as the demands of reading assignments in materials written for mature readers, has a beneficial effect on the student's use of English. For this reason, it is desirable for the work in composition to extend over the whole freshman year. Using the S-course of the freshman year makes this possible without increasing the total amount of time given to the composition course.

At present, some freshmen — usually about ten per cent of the entering class — are exempted from the composition requirement on the basis of scores of 600 or higher on the verbal section of the College Board Scholastic Aptitude Test. The Committees feel, however, that all students, even those whose reading and writing are adequate for college work, can profit by the composition course. Accordingly, we recommend that for freshmen of superior ability, honors sections be set up in which they are given more difficult work in both reading and writing. In this way the superior student can be challenged at once, and kept from merely coasting through his freshman year on the basis of his superior intelligence or preparation.

The detailed plans for the freshman S-course in English composition should be worked out by the English Department. The Curriculum

Committees feel that the course should include reading and writing of increasing difficulty and complexity as the year goes on, and that as much use should be made of the individual or small-group conference as is possible under present and predictable teaching loads. It may also be possible to make occasional use of papers written for other courses in place of themes.

3. Public Speaking and Research Methods

One of the present requirements most strongly endorsed by the members of the class of 1955 who returned our questionnaire is the course in public speaking (see Appendix B, Question A 3). Certainly the ability to speak coherently and forcefully, without embarrassment, is one of the marks of the educated man whatever may be his occupation. Therefore the Curriculum Committees recommend that training in public speaking occupy one half of the S-course of the sophomore year. As in English composition, students who display considerable speaking ability in a screening test to be given at the end of the freshman year should be placed in honor sections, where they can be given more difficult speaking problems, including those involving considerable gathering and organizing of material. The screening test should also reveal those who need special attention. The rest will presumably take a course roughly the same as the present Pu. 20. One half of the sophomore class will take speech each semester.

To alternate with this course and fill out the S-course of the sophomore year, the Committees recommend the establishment of a course in the use of the library and the preparation of the long documented "research" paper. This work is now handled in English 12, the course in the introduction to literature which makes the second half of the freshman English course. This is an unsatisfactory arrangement for two principal reasons: in the first place, the research paper has no significant relationship to the rest of the course and takes time that should be used for more reading, and secondly, since the institution of the Humanities courses, at least half of the freshmen take Humanities 12 and thus miss the research paper training entirely. The S-course arrangement makes it possible to set this up as a separate activity, with more thorough training in the use of the library and the gathering and organizing of material as well as in the mechanical techniques of bibliography and footnote writing. After the first few weeks of the semester, the sections will probably need to meet only infrequently, and the students will work on their own, with occasional conferences on different phases of the work. The course should be staffed by the English Department, but cooperative use should be made of the Library staff.

4. Foreign Language

The study of foreign languages is universally fostered by those colleges and universities which attempt to give their students a liberal education. Certainly there would be few to disagree with the proposition that some command of a language other than his native speech is a mark of the educated man. The question for debate here is not whether to study a foreign language, but when, how much, for what reason, and in what way to study it, not to mention the basic question: how many languages should be studied? Opinions vary widely on these questions.

The Curriculum Committees are in substantial agreement on certain fundamental points:

1. Command of one language is better than a smattering of two or more.

2. The earlier a language is studied the better. Ideally, the student should have adequate command of at least one foreign language long before he comes to college.

3. Command of a living language involves understanding and speaking as well as reading and writing.

4. There are values to be derived from the study of a foreign language even if it is never put to practical use. A very limited knowledge of another language is enough to bring home the realization that there are many different ways of talking and thinking about things, and that one's native language is not the unique mode of communication among men. Further knowledge introduces one to the cultural heritage of those who use and have used the language, in a way that no amount of study of translated material can.

5. Apart from practical considerations, the values derived from foreign language study are largely independent of the language studied. From the point of view of cultural value, it is obvious that those languages which have been used for a long time by peoples who have contributed to and transmitted the main streams of Western culture — primarily Greek, Latin, French, German, and Italian — are most important. From the linguistic point of view, the study of a non-Indo-European language, such as Chinese, Hebrew, Arabic, Turkish, or Hungarian, is more valuable because it reveals more contrast. From the practical point of view, languages which are widely used in commercial, diplomatic, and scientific circles — notably French, German, Spanish, and Russian, and in the near future probably Chinese and Arabic -- are the most useful.

Agreement on these points leads the Committees to make certain recommendations regarding language study. They are the following:

1. All students should have the experience of reading and discussing some important literature in a foreign language in a course conducted wholly in the language. An exception here is the classical languages, the actual use of which in conversation and discussion, while valuable, is much less important than it is in the case of "living" languages. Since to acquire the kind of command of a living language necessary to profit from such a course necessitates two full years of college study, the Committees recommend that all students be required to pursue a modern language through the fifth semester of college work or a classical language

(Latin or Greek) through the fourth semester of college work.

2. Students should be encouraged to continue in college a language they have studied in school, unless there is a strong reason for changing (i.e. from Spanish to French or German for those who plan to go to graduate school, or to Russian, for those who want this language but went to schools where it is not offered, etc.).

3. Students continuing a language from high school should be placed at the proper level in college work by means of a proficiency test.* Depending on the result of the test and a week or two of observation in class, they can be assigned to the first, second, third, fourth, or fifth semester of language work. It is unlikely that more than a very few students will be able to anticipate the fifth semester by examination.

4. Regardless of the amount of language offered for admission, students should receive full college credit for all language work done in college. For example, if a placement test shows that a student should begin over again a language he has offered for admission, he should be granted credit for the beginning course.

5. The fifth semester course in a modern language should be conducted as much as possible — wholly, it is hoped -- in the language. Some departments may choose to offer only a single "fifth course" as an introduction to their other advanced courses, while some may prefer to give several courses, or even all their advanced courses, on the "fifth course" level.

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* For recommendations about proficiency tests by the consultant, Professor Peyre, see Appendix C.

5. Humanities, English Literature, and Philosophy

The present sequence, Humanities 12-21-22, was the product of an earlier curriculum study, conducted about ten years ago. It was conceived as one of a group of "core courses" in the broad fields of knowledge, and it was the expectation of those who planned it that it would be matched by similar courses in the social and natural sciences. These courses, however, never materialized. The Humanities sequence was tried out for several years on an experimental basis and finally given permanent status after a formal evaluation demonstrated its value. It was conceived as a unit, and the original notion was that all who entered Humanities 12 were committed to take the whole sequence. This policy has not been followed very closely, however; many students drop the course after the first or second semester, and some are permitted to enter the later semesters without having taken Humanities 12. In order to foster this sequence, the English Department accepted Humanities 12 as a legitimate alternative to English 12, Introduction to Literature, which had been the regularly required second semester of freshman English. The English Department also accepted Humanities 21-22 as alternative courses in the "broad" major in English.

The Curriculum Committees are convinced of the value of this course, but they feel that if it is to be retained in the curriculum, certain changes should be made in it, as follows:

1. In consideration of the somewhat fuller semester courses under

the 4+S plan, the Humanities sequence should be reduced from three to two semesters.

2. The course should be kept intact, if necessary by refusing credit for the first semester unless the second is also completed, and by admitting no one to the second semester who has not taken the first. In short, it should be made a double course, extending through two semesters.

3. The course should be given a firmer administration. Under the present arrangement, it has been supervised by an already overburdened department head and staffed by those willing to undertake the quite burdensome preparation in addition to their normal teaching loads. In some cases, the teaching assignment as well has been in addition to a full course load within the instructor's own department. The course should have its own director, free from other administrative duties. Those who teach it should be relieved from a corresponding amount of teaching in their regular departments. If possible, they should be relieved of an additional course during any semester when they are giving the course for the first time.

4. Without introducing undesirable regimentation, there should be a larger degree of correspondence among the various sections of the course than has been the case in the past. The course should meet as a whole once or twice a week, for lectures by various members of the faculty, including some who may not be on the regular staff of the course. The staff should meet regularly, as often as once a week, to discuss the

content and management of the course. There should be common examinations and agreement on the number and type of outside papers. Grading should be standardized and made more rigorous than it has been in the past.

Provided these changes are made, the Curriculum Committees recommend that this course be made one of two alternatives required of all students. The alternative option is a course in English literature and a course in philosophy. Since the material of the Humanities course is drawn wholly from literature and philosophy, this option would mean that either way the student would study these two subjects as part of his distribution. The difference between the alternatives would be that under one the material is ordered and integrated for the student and the approach is topical, while under the other the two disciplines are separately introduced and the approach, at least in literature, is by genres. The usual course in English meeting this requirement would be similar to the present English 12, but without the training in the research paper (since this would be covered in the sophomore S-course), and with a substantial increase in the amount of reading. Certain especially well qualified students might be permitted to take one of the more advanced courses in literature. The Department of Philosophy prefers to offer several introductory courses, any one of which would meet this requirement and serve as an introduction to further work in the department.

6. Literature, Music, and Fine Arts

As a further exploration of the general area of the humanistic studies, the Committees recommend that all students except those who must take a full five semesters of foreign language to meet the requirement recommended above be required to take a course in music, fine arts, or literature. The courses in music and fine arts that might be elected to meet this requirement should include both history and appreciation courses, similar to the present Music 11-12 and Art 11-12, and theory and methods courses, similar to the present Music 21-22 and Art 13-14.* Courses which are to be classed as literature courses for the purposes of this requirement will include courses in modern foreign languages beyond the "fifth course," in Latin or Greek beyond the fourth course, in both classical and modern literature in translation (including, it is hoped, a few new courses not now offered, such as the literature of Rome, the Bible as literature, literature of the Orient, etc.), and in English and American literature.

The Curriculum Committees hope that this requirement, which for the first time makes courses in music and fine arts a part of the distributional pattern, will lead to increased enrollment in these departments and consequent strengthening of their position. It has been recognized for some time that Franklin and Marshall is weak in these areas, which represent two of the oldest and most vital forms of man's artistic expression. The Committees recommend that the Administration and the Academic Council keep a continuing watch on these subjects, with an eye to the possibility that if sufficient demand develops, one or both of them might offer a major.

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*See Appendix D for some remarks on the study of music by Professor Gault.

The Committees expect that the waiver of this requirement for those who must take five semesters to meet the foreign language requirement will affect a relatively small number of students — those who begin a modern language in college or whose language preparation is so deficient that they must repeat their language from the beginning. This waiver is introduced simply to keep the distribution requirements from taking too much of the student's program.

7. Religion

The Curriculum Committees spent a great deal of time discussing the place of the study of religion in the curriculum, and had several meetings with the members of the Department of Religion on this matter. In addition, they had the advice of a distinguished consultant, Professor George F. Thomas, Chairman of the Department of Religion at Princeton. Much of what follows here is based upon a series of conferences with Professor Thomas and our own Department of Religion.

The academic study of religion, as distinct from theology on the one hand and religious indoctrination on the other, is a recent phenomenon in American education. Until the late nineteenth century, the assumption was that Christianity was taught by all professors, and whatever students might learn about other religions was acquired incidentally in the course of their study of the Old Testament and the Greek and Latin classics and philosophers. Two principal factors have operated to change this state of affairs in the last half century. The first of these is the vast increase in the number of young people of varying religious backgrounds attending college. The denominational college, drawing most or all of its students from one religious group, has largely given way to the more cosmopolitan institution, including among its students not only Protestants of many widely differing beliefs, but also Roman and Eastern Orthodox Catholics, Jews of varying degrees of orthodoxy, and a sprinkling of Buddhists, Moslems, and adherents of other faiths outside the Judaeo-Christian community, not to mention humanists, agnostics, and freethinkers. Although Franklin and Marshall retains its relation to the Evangelical and Reformed Church (now merged with the Congregational Christian Church in the United Church of Christ), it recognizes the religious pluralism of its student body by providing Roman Catholic and Jewish religious instruction at the same time as the Protestant chapel service.

The other principal reason for the establishment of religion as an academic discipline has been the great expansion of the kinds of knowledge now included in even the undergraduate curriculum. The growing importance of studies such as psychology, anthropology, and sociology has shown that it is possible to study religion more or less objectively, as a phenomenon of great and continuing importance in human life, both social and individual. Teachers of religion in colleges and universities make a sharp distinction between the ceremonial and evangelical aspects of religion and the academic study of religion, and maintain that only the latter is their appropriate function. They feel that their role is not to urge a specific faith upon their students nor to make them more religious, but to remove their religious illiteracy (largely the result of the American adherence to the doctrine of separation of Church and State, and the failure of the churches to carry out their educational function), to give them a kind of objectivity about religion, and to afford them the opportunity to achieve a reasoned faith. That the Department of Religion at Franklin and Marshall accepts this definition of its function is made clear by its own statement in a document prepared especially for the use of the Committees:

> We regard any sectarian, proselytizing purpose as absolutely indefensible, and whole-heartedly regret that certain kinds of "church" colleges have made possible the emergence of such a stereotype. We have insisted, and we continue to insist, that the proper academic goal of a study of religion is the understanding of religion in its multiple manifestations: in the literature which it has produced and which it interprets, in the cultus through which it maintains a continuity with the heritage of its past, in the social groupings which it brings into being and/or influences, in the internal history of its own life and the influences which it has exerted on world-history, in the creative expressions which it has produced, and in the theological interpretations which it has set forth.

In view of the vital role of religion in human history as well as in the life of the individual man, the Curriculum Committees recommend that all students be required to take a course in this field. The view of the Department of Religion is that there should be a single introductory course, taken by all students, and serving as a foundation for further elective courses in the subject as well as for a major. The Committees agree with the consultant that such a course might well deal with the methods of religion, the primary categories of its study, an introduction to the Judaeo-Christian religious tradition, and some attention to non-Christian religions other than Judaism. Since this is roughly the content of Religion 11-12, the present required course, little change in subject matter is indicated. There will have to be some selection, however, in order to condense this material into a single course under the 4+S program.

The Committees hope that the Department of Religion will offer a series of second courses in religion to be elected by those stimulated to further study as a result of taking the required course. Among the courses suggested by the consultant were Christian Ethics, Biblical Literature, Philosophy of Religion, Religious Education, and Religions of the Far East.

8. Mathematics

Like the study of foreign language, the study of mathematics may have widely differing methods, aims, and justifications. On the one hand, it may take the form of a repertory of operational techniques, important because of their usefulness in carrying out tasks set by other fields of study or the practical necessities of life. On the other hand, mathematics may be taught as a mode of thought and a system of ideas, whose relation to the practical problems of other disciplines is less immediate. The former approach makes mathematics primarily a "skill" or "tool" subject, the justification for which is found outside the discipline itself. The latter approach makes mathematics primarily an exercise in symbolic language and the principles of deductive reasoning, and hence one of the liberal arts and part of a liberal education, carrying its own justification. The choice of content, as well as the materials and pedagogical methods used in a course in mathematics, is governed completely by the selection of one or another of these approaches, or the attempt to combine them. Both seem to be necessary in modern higher education: work in many fields, such as physics, chemistry, geology, astronomy, and economics, is based on a foundation of practical mathematics, while theoretical mathematics makes an important contribution to the liberal education of every student, regardless of his field of concentration or intended vocation.

For these reasons the Curriculum Committees recommend that all students be required to take at least one course in mathematics. This would presumably be the present Mathematics 11-15-17, now being given experimentally as the only introductory mathematics course. This course is at present designed to serve two purposes: an introduction to mathematics as one of the liberal arts, and a foundation for further work in mathematics, whether elective, required as a prerequisite to other studies, or a field of concentration.

It is of interest to note that this requirement will not make a very significant change in individual student programs. The study of the individual programs of the class of 1958 (see Appendix E) revealed that all but 16 of the 250 students in that class had had at least one course in mathematics in college.

9. The Natural Sciences

In the mid-twentieth century no justification need be offered for considering the study of natural science an essential part of a liberal education. The tremendous amassing of knowledge about the physical universe, the rapid development of new techniques of discovery, the advance and refinement of theory on many fronts, and the resulting changes not only in modes of life but also in philosophical concepts of the nature of the universe and of man are certainly the most spectacular intellectual development of the last century. No one can be called liberally educated who is ignorant of the methods and modes of thought of the sciences, or who does not know something of the principal scientific ideas which are most productive of understanding and control of the physical environment in our time.

The past two hundred years have seen the branch of learning once called "natural philosophy" divide into a number of separate disciplines, each with its own subject matter and to a considerable extent its own methodology, but all still falling together under the general rubric "science." The first problem facing the Curriculum Committees was whether to attempt to restore unity to this area by recommending integrated "core courses" in science or at least in certain combinations of the sciences, or to require that students take courses in one or more of the distinct disciplines. On the basis of considerable investigation of integrated science courses elsewhere, as well as discussion with and among the members of the science departments on our own campus, the first of these alternatives was rejected. The amount of involved planning, the necessity for constant interdepartmental cooperation, the diffidence of instructors about venturing into fields not of their specialty, and the fear of an excessive "watering down" of the subject matter — all these considerations led the Committees to feel that core courses in science could not be made a success at Franklin and Marshall.

The alternative plan — courses in individual sciences — also poses questions. The chief of these is: given a limited time to spend on science, does the student profit more from relatively brief exposure to several of the sciences, or from longer experience with one or two? The subject matter of the various sciences is obviously different, but do they offer enough of a common experience so that the student who has studied one of them may be said to be educated in science? if so, does any single science have prior claim to being the most central? if not, how, in the limited time available, can a student study several sciences and still avoid superficiality? These points have been discussed at some length by the members of the various science departments, both among themselves and with the two Curriculum Committees. The proposal finally agreed upon represents a compromise between the feeling that each science has unique value for liberal education and the conviction that a superficial and watered down treatment of any of the sciences is worse than nothing.

The four sciences in which major programs are at present offered at Franklin and Marshall are physics, chemistry, biology, and geology.* These seemed to the Curriculum Committees to fall naturally, at least according to one principle of classification, into two pairs. Physics and chemistry are more quantitative and computational in nature and method, while biology and geology are more descriptive. This suggested the idea that it would be well for all students to have at least one course from each pair. Since this plan puts physics and chemistry into one "box" and biology and geology into another, it has come to be called the "box plan."

The Committees further felt that the maximum amount of time that all students can be required to devote to the sciences under the 4+S plan is three courses. Accordingly they recommend that all students be required to take at least three courses in natural science, one course from one of the two boxes and a two-course sequence from the other. This will insure that all students will take two laboratory sciences, one of them of the quantitative type and one of the descriptive type, and that they will study one of them through a full year.

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*This is by no means a universal pattern at liberal arts colleges. At Haverford, for instance, there is no department of geology, but it is possible to major in astronomy; at Oberlin, there are separate departments of botany and zoology.

Adoption of this requirement will make it necessary for the science departments to develop one-semester courses that will serve as introductory courses to their fields. They may elect to make these courses independent, or they may find it possible to plan them so that they will not only be suitable introductions for those who plan to go no farther, but will also serve as the first half of two-semester sequences. The science departments may differ also on the question of whether the one- or two-semester distribution course is to be a special course, or one which can also serve as the beginning course in a major program. It is the understanding of the Committees that the departments of physics and biology favor the first of these alternatives and the departments of chemistry and geology the second. In any case, the Committees feel that tnis is a matter for the individual departments to decide for themselves.

The Committees further recommend that when better laboratory facilities are available for astronomy and psychology, and some experience has been gained in the teaching of these two subjects as laboratory sciences, the Academic Council should consider including them in the box plan, astronomy in the box with physics and chemistry and psychology in the box with biology and geology.*

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*For a statement on the status of psychology as a natural science, see Appendix F.

10. History

The central position of the study of history in liberal education needs no demonstration. He who does not know the past cannot know the present, so that if our graduates are to be prepared for a full life in the world of today and tomorrow, they must have some understanding of its historical background. Admittedly, history is studied rather extensively in the secondary schools, but not always from the mature point of view characteristic of college work. Therefore, the Curriculum Committees feel that all students should have some work in history at the college level.

Accordingly, the Committees recommend that a new course in Medieval and Modern European History, extending through two semesters (hence actually a double course) be instituted, and that all students be required to take it, normally in the freshman year and certainly no later than the sophomore year. This recommendation is made subject to the following provisions:

1) The course is to be considered a unified year-long double course, rather than a two-course sequence. This means that neither half may be taken separately, that the two semesters must be taken in regular order, and that the final grade is the grade for the whole course. There should be a midyear examination and grade, but this grade is to be informational only (like the present midsemester grades) and is not to go on the student's permanent record.

2) The course is to be given as a large lecture course, meeting as a whole for lectures at least twice a week and broken up into small quiz sections for the remaining meeting or meetings.

3) The course is to be planned and developed from a fresh beginning, by a specialist in the field of European history specially appointed to plan and supervise this course and give the lectures. The quiz sections will be staffed by the other members of the History Department.

The Committees were led to recommend this emphasis on European history by several considerations, the most important being the following:

a) Some knowledge of the history of the Western world since the fall of Rome is an indispensable background to the study of political science, economics, sociology, English literature, modern language and literature, the fine arts, philosophy, and religion. Yet many of our students come to us without ever having had a course in European history.

b) Although other areas, such as the Middle East, the Far East, and Africa, are becoming more and more important in world affairs, the culture in which we live and which remains dominant in the world today has been shaped by the Western tradition.

c) The ideas and institutions that characterize the government, society, and economy of the United States have their roots in Europe of the Middle Ages and the Renaissance, so that while all our students have studied American history, they often lack the perspective gained from a knowledge of the European background.

The Committees are aware that this requirement, valuable though it must be, will inevitably leave out important areas of history — notably the ancient world and the non-Western areas, especially the Orient. It is to be hoped that the experience of this common course will stimulate students to elect further courses in ancient history, American history, English history, the history of other areas such as the Orient and Latin America, and more specialized courses in historical periods. All of the other courses offered by the History Department should profit from the fact that all students will have had a common background in a mature and rigorous course in the history of Europe.

11. The Social Sciences

The disciplines now represented in the Franklin and Marshall curriculum which are here grouped under the rubric of the social sciences are economics, sociology, anthropology, government, and psychology. At present sociology and anthropology are combined in one department, though it is conceivable that they might at some time become separate. It is possible also that in the future psychology might be reclassified as one of the natural sciences (see above, p. 50).

In this area perhaps more than any other the "door-opening" function of distribution becomes important. None of these subjects is customarily taught as such at the secondary-school level. To most entering freshmen they are little more than names. Seldom does a student enter college with the clear intent of majoring in one of them — a situation in sharp contrast with that in the natural sciences especially. The decision to major in one of the social sciences is usually the result of interest and enthusiasm generated in an introductory course, taken to fulfil a distribution requirement. For this reason it is important that students be introduced to these subjects as early as possible in their college career. But whether or not a student decides to pursue one or another of the social sciences further, by concentration or election, some experience of the ideas, methods, and subject matter of this group of disciplines is an essential part of his liberal education.

It would, of course, be desirable for the student to be introduced to them all. But once again the limits of time impose themselves. To require all students to take four or five courses in this area would either throw the distribution pattern badly out of balance or increase the total number of distribution requirements beyond reasonable bounds. The Committees are agreed, however, that a minimum of two courses in the fields covered by these studies should be required for all students.

Once again, as in the natural sciences, the Committees were faced with the choice between a unified "core course" and separate introductory courses in the individual disciplines. This question was discussed individually in the various departments involved and with the Curriculum Committees by their representatives. Although there was somewhat more support for the integrated course in this field than in the natural sciences, the Committees felt that the difficulties involved in planning and running such a course — much the same as those cited above in the discussion of the natural sciences — outweigh the advantages. Accordingly, the recommendation of the Curriculum Committees is that all students be required to take one course from each of two of the following departments: Economics, Government, Psychology, and Sociology and Anthropology.

The implication of this recommendation is that these departments will, where necessary, rearrange the subject matter of their introductory courses so that they will be satisfactory one-semester units. The Committees feel that it is up to the departments to decide whether they wish to offer more than one introductory course to meet this distributional requirement, and whether the distribution course is to serve also as the introduction to further courses, including the major sequence.

* * *

IV. THE CURRICULUM COMMITTEES RECOMMEND THAT THE DISTRIBUTION REQUIREMENTS FOR ALL STUDENTS BE AS FOLLOWS:

1. ONE S-COURSE IN ENGLISH COMPOSITION
2. ONE S-COURSE OF WHICH HALF IS IN PUBLIC SPEAKING AND THE OTHER HALF IN USE OF THE LIBRARY AND PREPARATION OF THE RESEARCH PAPER
3. FOREIGN LANGUAGE THROUGH THE 4TH OR 5TH COURSE[*]

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[*] See note page 56.

4. EITHER A TWO-COURSE SEQUENCE IN HUMANITIES OR ONE COURSE IN ENGLISH LITERATURE AND ONE COURSE IN PHILOSOPHY

5. ONE COURSE* IN LITERATURE**, FINE ARTS, OR MUSIC

6. ONE COURSE IN RELIGION

7. ONE COURSE IN MATHEMATICS

8. ONE COURSE FROM ONE OF THE FOLLOWING GROUPS AND A TWO-COURSE SEQUENCE FROM THE OTHER:

CHEMISTRY OR PHYSICS

BIOLOGY OR GEOLOGY

9. A TWO-SEMESTER COURSE IN MEDIEVAL AND MODERN EUROPEAN HISTORY

10. ONE COURSE EACH FROM TWO OF THE FOLLOWING:

ECONOMICS

GOVERNMENT

PSYCHOLOGY

SOCIOLOGY OR ANTHROPOLOGY

*Note: Foreign language is to be taken through the 4th course for those who elect Latin or Greek, and through the 5th course for those who elect a modern language. For those who must take five semesters of language (barring repeats) to meet this requirement, requirement 5 is waived. It is understood that proficiency examinations will be used to place students at the proper level of language study and that students will get credit for all courses taken in college regardless of what they offer for entrance.

**Note: Literature here includes courses in English and American literature, in modern languages beyond the fifth course, in Latin and Greek beyond the fourth course, and in both classical and modern literature in translation.

IV. CONCENTRATION

The other principal phase of undergraduate liberal education, complementing the education in breadth afforded by distribution, is the education in depth acquired through concentration. From the point of view of liberal education, the principal value of concentration is that it counteracts the tendency to superficiality and excessive dispersion of interest which is a possible consequence of the kind of distribution pattern proposed in the last chapter. The student who has been introduced to many new fields of knowledge quite rapidly during his first two years at college must have the opportunity to pull things together, to establish a center of gravity for his intellectual life, and to enjoy the sense of fulfilment which comes from even a modest degree of expertness in a single field. A well planned program of concentration can help him to do all these things.

Concentration also serves other purposes, more practical perhaps, but not for that reason any more important. It may be a way of preparing for further study in graduate or professional school. It may supply the kind of training and knowledge which are necessary for a specific vocation. It may be a way of acquiring knowledge of a subject one later intends to teach. In any case, it should be a planned and organized course of study, not merely a random collection of courses. The Curriculum Committees recommend that a program of concentration include the following:

1. A group of at least six regular courses and two S-courses (those of the junior and senior year), either in the same department or following a carefully arranged interdepartmental pattern. Normally the general outline of the concentration program in a given department should be planned ahead and described in the catalog. Provision should be made, however, for special programs desired by individual students who wish to plan interdepartmental fields of concentration. In such cases the programs should have the approval of the chairmen of all departments involved and of the Academic Council, which should designate the department head who is to be responsible for advising the student and planning his comprehensive examination.

2. A comprehensive examination, similar to that now in effect, to be taken at the end of the senior year. The S-course of the senior year is to be a seminar in the field of concentration similar to the present Senior Seminar, and conducted in whatever way the individual department may see fit. Students following an individual interdepartmental plan of concentration might be required to attend more than one senior S-course for part or all of the senior year.

3. A program of independent study or reading, adjusted to the conditions and requirements of the particular field. The focus of this program should normally be the S-course of the junior year. In most departments this may take the form of an independent reading program with occasional individual or group conferences, and with the amount and difficulty of the reading (or laboratory or field work, in the case

of some natural and social sciences) adjusted to the needs and abilities of the individual student.

4. In the case of especially superior students, Honors Work similar to that now provided for in the present curriculum. The Honors Work should normally be one of the four regular courses taken by the student, not a fifth course added to the 4+S program.

The Committees gave some consideration to the question of setting a top limit to the number of courses required for concentration. But in the light of the wide diversity in the major and related requirements of the various departments, they came to the conclusion that no useful purpose would be served by so doing. They do feel, however, that no program of concentration, combined with strategic use of the distribution requirements, should make it necessary for the student to take more than the normal 32 regular plus 4 S-courses. There may be some individual cases where a student may elect a major which does not dovetail too well with his distribution courses — such as deciding to concentrate in biology after taking geology to meet part of his science requirement, or deciding to major in one language after meeting his distribution requirements with another — but these will probably be quite rare. The student who shifts from one field of concentration to another in his junior or senior year may expect, as now, to have to take extra work.

The Committees feel that the present list of major fields should be retained as fields of concentration, with the exception of Education and the separate majors in Business Administration, which will be discussed under Special Programs in Chapter VI. A special committee was asked to investigate the possibility of an interdepartmental major in American Civilization. This committee made a thorough study of the question, and submitted a full report, printed herewith as Appendix G. In the light of the divided opinion of this special committee, the Curriculum Committees have nothing specific to recommend in this area. They do feel, however, that a beginning has been made, and that the Academic Council might well give further study to this matter. If our recommendation to permit individually planned programs of concentration is adopted, one or two interested students might be urged to experiment with an interdepartmental concentration in American Civilization.

The development of "teaching majors" in certain departmental and interdepartmental fields for those planning to go into secondary school teaching will be discussed in Chapter VI.

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V. THE CURRICULUM COMMITTEES RECOMMEND THAT ALL STUDENTS BE REQUIRED TO TAKE A PROGRAM OF CONCENTRATION, CONSISTING OF AT LEAST SIX REGULAR COURSES AND THE S-COURSES OF THE JUNIOR AND SENIOR YEARS, AND INCLUDING A PROGRAM OF INDEPENDENT READING AND A COMPREHENSIVE EXAMINATION. SPECIAL INTERDEPARTMENTAL PROGRAMS WILL BE PERMITTED IF THEY ARE APPROVED BY

ALL DEPARTMENT HEADS CONCERNED AND THE ACADEMIC COUNCIL. EACH STUDENT WILL SUBMIT A STUDY PLAN APPROVED BY THE DEPARTMENT HEAD COVERING HIS FIELD OF CONCENTRATION AND THE REMAINDER OF HIS DISTRIBUTION NO LATER THAN THE END OF THE FIRST SEMESTER OF HIS SOPHOMORE YEAR.

V. PHYSICAL EDUCATION

The primary function of the undergraduate college is the intellectual development of its students. However, the modern college, particularly the small liberal arts college, also assumes responsibility for the physical development, well-being, and recreation of its students. The degree of responsibility assumed and the types of programs developed in response to it vary greatly from one college to another. But the trend among colleges similar to Franklin and Marshall is away from a strong emphasis on competitive sports, whether intercollegiate or intramural,* and toward the training of students in physical games and other activities which they can continue to take part in after they graduate — the so-called "carry-over" sports.

One of the most carefully and thoughtfully organized programs of this sort is that at Hamilton College. For this reason the Curriculum Committees asked Mox A. Weber, Professor of Physical Education and Director of Athletics at Hamilton, to serve as a consultant. The members of the Committees, as well as others who met Professor Weber and learned about the Hamilton program, were so impressed by it that they felt that the best thing that can be done at Franklin and Marshall is to imitate the Hamilton program as closely as our somewhat different local circumstances permit. The following recommendations, therefore, are based on the Hamilton program, which is described at some length in Appendix H.

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*It is of interest here that the plan for "New College" in the Connecticut Valley, sponsored by Amherst, Massachusetts, Smith, and Mt. Holyoke, envisages an undergraduate college with no intercollegiate sports at all.

1. The Curriculum Committees recommend that all students except those specifically exempted for medical reasons be required to take part in physical education three hours per week until they have met the standards established in the next paragraph (2), and have completed at least two full years of such participation.

2. All such students will be expected to pass tests, set by the Physical Education Department and similar to those given at Hamilton, in four areas:

   a) Physical fitness
   b) Swimming
   c) One outdoor carry-over sport (probably golf or tennis)
   d) One indoor carry-over sport.

3. Every student will be required to enroll in instructional classes in these areas, according to the season, until he has successfully passed the tests. If this occurs before the end of his second year, the student will be allowed to sign up for three hours a week of intramural team sport or other physical activity, which shall be supervised by the Department of Physical Education. Voluntary participation in activity of this sort beyond the sophomore year will be encouraged. Those who do not pass all four tests before the end of their second year will be required to continue under instruction until they do.

The Committees recognize that this program represents quite a radical departure from our present physical education program, and that to put it into effect will involve replanning of the use of physical plant, some retraining of present members of the Physical Education staff and a probable increase in the size of that staff, and perhaps some other innovations such as an arrangement with a local golf course permitting our students to use it at certain uncrowded hours for a relatively small fee, to be paid by the college. The Committees recommend that future planning of athletic facilities and staff be done with the needs of this program in mind.

* * *

VI. THE CURRICULUM COMMITTEES RECOMMEND THE ADOPTION OF A TWO-YEAR PHYSICAL EDUCATION PROGRAM, MODELED ON THAT IN EFFECT AT HAMILTON COLLEGE, AND EMPHASIZING PHYSICAL FITNESS AND INSTRUCTION IN CARRY-OVER SPORTS.

VI. SPECIAL PROGRAMS

Throughout this report, the emphasis has been on the primary role of Franklin and Marshall as a small liberal arts college — to insure that all its graduates have a liberal education as it has been defined in the first chapter. In a few fields, however, the college engages in specific vocational training. It is clear that the premedical program is part of the long process of training physicians, the teacher-training program is concerned with the vocational training of secondary school teachers, the business administration program is directed to the specific training of business men, and the principal, if not sole, aim of the Air Force Reserve Officers Training Corps is to produce commissoned officers in the Air Force Reserve. The Curriculum Committees have studied all four of these and believe that certain modifications of them will be to the advantage of the college.

1. The Premedical Program

The importance of the premedical program at Franklin and Marshall needs no emphasis here. Our reputation in this field has been honestly earned and maintained by our excellent departments of biology and chemistry and our enviable success in medical school admissions. The Curriculum Committees feel that if there is a discrepancy sometimes in standards of work and quality of students between the premedical group and those in other areas, this is to be adjusted by strengthening the other areas, not by in any way weakening the premedical program. The Committees, therefore, envisage no major changes in the premedical course.

At present the greater number — probably at least 80% — of our premedical students major in biology. They do so, most probably, because of one or another of the following reasons:

1. The college catalog, with its published "premedical curriculum" (pp. 48-50) gives priority to the biology and chemistry majors.

2. The discipline of biology is more closely identified with the basic medical sciences than any other academic field, and a student with a predilection for medicine might well be attracted to the subject of biology.

3. A student with a penchant for science but with a modest ability in mathematics would be inclined to choose the biology major instead of chemistry or physics.

A major in science has certain advantages for the premedical student. It keeps him working predominantly in areas where his motivation is likely to be highest. It provides a core of learning which enables him, particularly if he is only a mediocre student, to cope with the range and depth of basic medical knowledge which he must master.

There are, however, certain disadvantages as well. Unless he takes well above the minimum number of courses or semester hours required for graduation, his program is overloaded with science. The more thorough his grounding in science, the less opportunity he has for learning in other fields of thought. The better prepared he is to contend with two years of fundamental medical science, the less likely he is to be prepared to understand social, historical, and humanistic matters, even as they relate to his profession.

The advantages of the science major are recognized by every premedical student. The disadvantages often do not appear until the student encounters others in medical school who have not been so narrowly trained. Then, when it is too late, he may deplore his undergraduate curriculum and censure the college for faulty guidance. This is supported by the statements of members of our own class of 1955 now completing formal medical training (see Appendix J) and by the sentiments of practicing physicians.

The Committees are of the opinion that a premedical student should be permitted to concentrate in whatever field appeals strongly to him. If he chooses to major in a science, they feel that the strengthened distribution requirements in other areas recommended earlier in this report will assure him of a broader general education than is now the case. On the other hand, if he chooses to major in one of the humanities or social sciences, provision should be made if possible for him also to fulfill the minimal requirements in science for admission to medical school without exceeding the normal course program of 32 regular and 4 S-courses.

An examination of the admission requirements of the 36 medical schools to which Franklin and Marshall students direct their applications (see Appendix K) will reveal that the following program would meet the requirements. Accordingly, the Curriculum Committees recommend that the basic requirements for the premedical program shall be:

1. Biology — four courses
    - a) a two-course sequence in general biology
    - b) a two-course sequence in comparative anatomy and embryology
2. Chemistry — five courses
    - a) a two-course sequence in inorganic chemistry and qualitative analysis
    - b) a two-course sequence in organic chemistry
    - c) a course in quantitative analysis
3. Mathematics — two courses
4. Physics — a two-course sequence.

This comes to a total of thirteen courses. But with proper use of the distribution pattern, four of these — two in biology, one in either chemistry or physics, and one in mathematics — will be included in the distribution. The remaining eight, added to the fifteen to eighteen required for distribution, will leave ten to thirteen courses for concentration. This should normally make possible concentration in such fields as philosophy, psychology, history, government, and English for those premedical students who wish it.

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VII. THE CURRICULUM COMMITTEES RECOMMEND THAT THE MINIMAL PREMEDICAL REQUIREMENTS BE SET AT THIRTEEN COURSES: FOUR IN BIOLOGY, FIVE IN CHEMISTRY, TWO IN MATHEMATICS, AND TWO IN PHYSICS.

2. The Teacher-Training Program

The Curriculum Committees believe that the preparation of secondary-school teachers is a legitimate and important function of the liberal arts college, and that Franklin and Marshall should not only continue its program in this field but strengthen it by greater cooperation among the departments involved and by a more determined effort, on the part of those concerned with guidance, to interest more qualified students in entering the profession. The recommendations which follow are intended to strengthen our program of teacher education by bringing it into accord with the conclusions of our distinguished consultant, Dr. Frank R. Kille, whose views are summarized in Appendix L.

1. The Committees believe that prospective teachers should concentrate in the subject which they intend to teach, or in one of them if they intend to apply for certification in more than one. It should be remembered that concentration as conceived of in this curriculum is more than an accumulation of courses or credit hours in a given department. As we have stated above, its primary purpose is to "insure that the student has at least a limited experience of knowledge in depth,

during which he forms an intellectual and to some degree social affiliation with a group of faculty members and fellow students for whom a single academic discipline has paramount importance." It seems axiomatic to the Curriculum Committees that a prospective teacher should make this affiliation — which derives from the senior seminar and comprehensive examination as much as from individual courses — with the department representing the subject he wishes to teach.

2. An implication of this recommendation is that in certain areas where secondary teaching fields do not coincide with college majors or where the program of concentration appropriate for the student planning to go on to graduate study for the Ph. D. is not the ideal one for secondary-school teachers, the departments should plan special "teaching majors." Some of these should be interdepartmental combinations, such as physics-mathematics, biology-chemistry, or history-government. In addition, students who still have electives left after meeting distribution, concentration, and certification requirements should be advised to group these in such a way that combined with distribution courses they form a teaching minor. For instance, one more year of history beyond the distribution requirement of European history and the certification requirement of U.S. and Pennsylvania history would permit certification in history, at least under the present state requirements. One more course in a modern foreign language beyond the fifth semester required by distribution will in many cases permit certification in that field as well.

3. A second implication of the first recommendation is that the major in education is to be discontinued, and the Curriculum Committees so recommend. They feel that the Department of Education should concentrate its efforts on the basic courses required for certification by the various State Departments of Public Instruction. The specific planning of these courses is a matter for the Department of Education, in consultation with the State Department of Public Education in Harrisburg. The view of Dr. Kille and of other specialists in this field such as Dr. Paul Woodring of the Ford Foundation is that there should be four basic areas: an introduction to education, a course in principles of secondary education, a course in educational psychology, and a program — probably a one-semester double course under the 4+S plan — of student teaching. In addition to these five courses, the prospective teacher is required to take introductory psychology (as a prerequisite to educational psychology), which can normally be a part of his distribution under requirement 10. He must also take U.S. and Pennsylvania History as an elective. If this is a full year course, he will need to use seven elective courses to meet certification requirements. With a distribution requirement of fifteen to eighteen courses, he will have eleven to fourteen courses free for his concentration. The Committees expect that this will permit most concentration programs without alteration, and that the rest will be accommodated by special teaching majors, as recommended above.

4. The Committees recommend that a standing committee of the

faculty be appointed to exercise general supervision of the teacher-training program. This committee, perhaps to consist of two members of the Education Department and three others, one from each of the three broad areas of study, should exercise continued vigilance over the program and maintain liaison with the local schools and the State Department of Public Instruction. It should function much as the present premedical and pre-legal committees do in the recommendation of graduates for teaching positions. The committee should also stand ready to assist department heads in advising their major students who are interested in secondary-school teaching.

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VIII. THE CURRICULUM COMMITTEES MAKE THE FOLLOWING RECOMMENDATIONS IN REGARD TO THE TEACHER-TRAINING PROGRAM:

A) THAT PROSPECTIVE TEACHERS CONCENTRATE IN THE SUBJECT THEY INTEND TO TEACH;

B) THAT SPECIAL TEACHING MAJORS BE ESTABLISHED IN DEPARTMENTS WHOSE REGULAR MAJOR IS NOT APPROPRIATE FOR PROSPECTIVE TEACHERS AND IN CERTAIN INTERDEPARTMENTAL FIELDS;

C) THAT THE MAJOR IN EDUCATION BE DISCONTINUED;

D) THAT A STANDING COMMITTEE OF THE FACULTY BE APPOINTED TO SUPERVISE THE TEACHER-TRAINING PROGRAM.

3. Economics and Business Administration

In the field of teacher training, the specific requirements of courses in education are laid down by state authorities, and the science courses required by premedical students are specified by the medical schools. Similarly, the educational requirements for a certified public accountant are established by state regulation, variously in different states. In the general field of preparation for business, however, as for law, there is no such external sanction. The recommendations of business leaders are most frequently for a broad liberal arts background, with emphasis on certain traditional disciplines such as economics, government, psychology, mathematics, and English.* On the other hand, the personnel representatives of various firms who come here to interview our seniors favor those who have had work in various fields of business administration. For this reason, the Curriculum Committees feel that some work in business administration, in addition to the program in accounting, should be retained in the curriculum. They also feel, however, that economics should be given stronger status as one of the social sciences, more distinct than it is in our present curriculum from the vocationally oriented courses in business.** The recommendations of the Committees thus come under two headings as they concern the two departments involved.

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*For a representative statement of this sort, see A Businessman Looks at the Liberal Arts by Clarence B. Randall (White Plains, N. Y.: Fund for Adult Education, 1957).

**For documents relating to this area, including the recommendations of two consultants, see Appendix M.

1. Economics. As one of the important academic disciplines in the general area of the social sciences, economics should be a strong department in any liberal arts college. The Curriculum Committees recommend that as soon as possible the Department of Economics be strengthened in numbers; that it develop the full repertory of standard courses offered in liberal arts colleges of the first rank; and that it be kept clearly separate from the area of business administration. An economics department of this sort would be the core of a strong and broad program of education for business leadership.

2. Business Administration. The Curriculum Committees endorse the proposal of the Department of Business Administration that its work be concentrated in two major fields in place of the present four. These would be the following:

a) Accounting. The program of concentration in accounting would consist of nine courses in accounting, two in introductory economics, one in business law, and one in business finance. Students wishing to meet all requirements for the C. P. A. examinations in New York State would have to take one additional course in finance, one in business law, and two in other business subjects.

b) General Business Management. This is designed as a rigorous program which will provide a broader course of study than the specialized accounting option. There would be thirteen required courses, as follows:

Subjects	Courses
Economic Principles	2
Basic Accounting	2
Advanced Courses in Accounting:	2
Either Intermediate Accounting and Advanced Accounting	
or Cost Accounting	
Business Statistics	2
Production Management	1
Business Finance	1
Marketing	1
Business Law	1
Problems and Cases in Business Policy (Senior S-course)	1
Total	13

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IX. THE CURRICULUM COMMITTEES RECOMMEND THAT THE DEPARTMENT OF ECONOMICS BE STRENGTHENED AND THAT IT OFFER THE FULL LIST OF STANDARD COURSES IN THIS SUBJECT.

X. THE CURRICULUM COMMITTEES RECOMMEND THAT THE DEPARTMENT OF BUSINESS ADMINISTRATION OFFER TWO CONCENTRATION PROGRAMS, ONE IN ACCOUNTING AND ONE IN GENERAL BUSINESS MANAGEMENT.

4. Air Force Reserve Officer Training

In the light of the fact that in the class of 1958 only 6 students out of 115 who began the R. O. T. C. program completed it and were commissioned, it seems to the Curriculum Committees that there is not enough demand for this program to warrant its continuance.[*] Accordingly, they recommend that the Administration take the appropriate steps to discontinue the program.

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XI. THE CURRICULUM COMMITTEES RECOMMEND THAT THE AIR FORCE RESERVE OFFICER TRAINING PROGRAM BE DISCONTINUED.

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[*] For figures on AFROTC enrollments over the last 5 years, see Appendix N.

VII. REQUIREMENTS FOR A DEGREE

The number and kind of courses which must be taken to complete a program for a degree have been discussed at length in the chapters on distribution and concentration. There remains to be settled the question of the quality of work — as measured by grades — which a student must attain in order to be considered worthy of receiving the bachelor's degree.

Under our present system, the student is required to earn "at least 120 academic credits and 120 quality points." Quality points are awarded on the basis of one per semester-hour of C-grade work, two per semester-hour of B-grade work, and three per semester-hour of A-grade work. An implication of this regulation is that if a student takes no more than the minimal 120 credit hours, he must maintain a C average in order to graduate; that is, to obtain the necessary 120 quality points, he must match every hour of D work with an hour of B work or half an hour of A work. Looked at from another point of view, although D is considered a passing grade, it contributes no quality points, so that the student who "passes" all his courses with D's is no nearer his degree than if he had failed them all, since he acquires no quality points.

A consequence of this state of affairs has been to establish the grade of C in the minds of students and faculty as the reward for merely adequate work, rather than the measure of the average accomplishment. In turn, this has had the effect of setting the standard for the "honor grades" of B and A at lower levels than if D were a respectable passing grade and C an average grade. This state of affairs is clearly indicated by the overall grading patterns of the college. Here is the percentage distribution of the five grades for the whole college for the academic year 1957-58:

	A	B	C	D	F
1st Semester	15.6	32.5	33.5	11.7	6.7
2nd Semester	16.6	34.1	33.8	10.7	4.8

The grading habits of a faculty are, of course, the product of a multitude of complex factors. The Curriculum Committees are under no illusion that they can be changed by any sort of legislation, any more than a man by taking thought can add a cubit to his stature. But they do feel that to re-establish the grade of D as not only a passing grade but one which contributes to both the quantitative and the qualitative requirements for graduation would make it possible to establish C as more nearly an average grade, B as an honor grade, and A as a mark of genuine distinction.

One further matter which affects the establishment of qualitative standards for graduation is the kind of distribution pattern recommended in Chapter II. In many, perhaps most, respects, this is not greatly different from the distribution requirements now in effect. There are, however, three important new requirements. In contrast to the present plan, under the proposed plan every student will be required to take (1) a course in foreign language at the literary level, conducted in the language itself (except for those who take Latin or Greek), (2) a course in mathematics, and (3) a course in either physics or chemistry. There are students of considerable intelligence, otherwise fully capable of creditable college work, who are simply not able to handle one or another of these subjects to the satisfaction of college instructors. Unless the passing standards for these and other distribution courses are to be drastically lowered, or these courses badly clogged with repeaters, some loophole must be afforded the student who, with the best will in the world, is simply incapable of passing one or two subjects which lie far from his special interests and capabilities.

In the light of these considerations, the Curriculum Committees recommend the following qualitative and quantitative requirements for graduation:*

1. To qualify for graduation, a student must submit a program consisting of 32 regular semester courses and 4 year-long supplementary courses (called S-courses), in which he has received a grade of D or better in the 4 S-courses and at least 30 of the regular courses, and a grade of C or better in at least 24 of the regular courses.

2. The candidate for graduation must complete an approved pattern of distribution. He may submit as many as two regular courses

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*For a study of requirements at 30 liberal arts colleges, see Appendix O.

with grades of F as part of this pattern, provided the Academic Standing Committee has exempted him from the necessity of repeating them.

3. The candidate for graduation must fulfill a concentration pattern in a subject-matter area, approved by the departmental chairman or chairmen involved, with an average of C or better in the courses offered for concentration and no grade below D in any of them, and a grade of C or better in a comprehensive examination in his field of concentration.

4. Unless specifically exempted for medical reasons, the candidate for graduation must complete satisfactorily a program in physical education of at least four semesters, in the course of which he successfully passes four special tests.

Students who successfully complete these four sets of requirements will be recommended by the Faculty for the degree of Bachelor of Arts, except that a student whose field of concentration is mathematics or one of the natural sciences, or an interdepartmental program in the sciences, may be recommended for the degree of Bachelor of Science if he so requests in writing at the time that he applies for admission to candidacy for a degree.

Some corollaries of these recommendations are:

a) discontinuing the degree of Bachelor of Science in Economics;

b) abolishing the quality point requirement;

c) discontinuing special "divisional requirements" and with them the need for divisions as organizational units in the administrative structure of the college.

* * *

XII. THE CURRICULUM COMMITTEES RECOMMEND THAT THE DEGREE OF A.B. (OR IN CERTAIN CASES B.S.) BE AWARDED TO STUDENTS WHO TAKE 32 REGULAR AND 4 SUPPLEMENTARY COURSES, WITH GRADES OF D OR BETTER IN ALL SUPPLEMENTARY COURSES AND AT LEAST 30 REGULAR COURSES AND C OR BETTER IN AT LEAST 24 REGULAR COURSES, SUCH COURSES TO INCLUDE APPROVED PROGRAMS OF DISTRIBUTION AND CONCENTRATION WHO PASS A COMPREHENSIVE EXAMINATION WITH A GRADE OF C OR BETTER, AND WHO SUCCESSFULLY COMPLETE A PROGRAM OF PHYSICAL EDUCATION UNLESS SPECIFICALLY EXEMPTED FOR MEDICAL REASONS.

XIII. THE CURRICULUM COMMITTEES RECOMMEND THAT THE DEGREE OF BACHELOR OF SCIENCE IN ECONOMICS BE DISCONTINUED.

XIV. THE CURRICULUM COMMITTEES RECOMMEND THAT THE ORGANIZATION OF THE ACADEMIC DEPARTMENTS INTO DIVISIONS BE ABANDONED.

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APPENDIX A

Consultants to the Curriculum Committees

In premedical studies —

Harry J. Carman, Ph.B., A.M., Pd.B. (Syracuse University), Ph.D. (Columbia University); honorary degrees of L.H.D., LL.D., D.P.S. from twelve different institutions. Grade school teacher, high school principal, teacher of history and political science at Syracuse; instructor and professor of history at Columbia. Dean of Columbia College. Visiting professor at Lake Erie College and Harvard. Trustee of various colleges and recipient of several awards. Author and editor of books in American history; author (with Severinghaus and Cadbury) of Preparation for Medical Education in the Liberal Arts College (1953).

In economics and business administration —

Joseph D. Coppock, A.B. (Swarthmore), A.M., Ph.D. (Columbia); Phi Beta Kappa. Teacher of economics at Hendrix College, Swarthmore, University of California, Haverford, University of Oregon. Now professor of economics at Earlham College. Government service with War Production Board, Office of Price Administration, Department of State. Delegate to ECOSOC, 1946-52; visiting professor, National War College, 1951-53. Author of two monographs.

In teacher education —

Frank R. Kille, B.S. (College of Wooster), S.M., Ph.D. (University of Chicago), LL.D. (College of Wooster). Marine biologist, teacher of biology in Hubbard, Ohio, High School, Birmingham-Southern College, University of Chicago, University of Rochester, Swarthmore College, Carleton College. Dean, Carleton College. Recently appointed Associate Commissioner of Education in New York State.

In foreign language —

Henri M. Peyre, B.A. et Licence (Sorbonne, École Normale Supérieure); Docteur de l'Université de Paris. Professor of French Literature, Bryn Mawr College, Yale University, University of Cairo; Sterling Professor of French and Chairman of the Department of Romance Languages at Yale; visiting professor or lecturer at University of Chicago, Columbia, University of Buenos Aires, Cornell, Bryn Mawr. Author of many books and articles in literary history, literary criticism, and comparative literature.

In religion —

George F. Thomas, A.B. (Southern Methodist University), B.A. (Oxford University), Ph.D. (Harvard University), S.T.D. (honorary, Kenyon College), D.Litt. (honorary, Southern Methodist University). Professor of philosophy at Swarthmore, Dartmouth, University of North Carolina; Professor of Religious Thought and Chairman of the Department of Religion at Princeton. Fellow of the National Council on Religion in Higher Education. Author of several books in the field of the philosophy of religion, the latest being Christian Ethics and Moral Philosophy, 1955.

In physical education —

Mox A. Weber, B.A. (Oberlin College), M.A. (Columbia University). Professor of Physical Education and Director of Athletics at Hamilton College. Head coach of tennis, Hamilton College. District II representative of N.C.A.A. on Small College Committee. Member, Eligibility Committee of Eastern Collegiate Athletic Conference. Served in various capacities for N.C.A.A. and E.C.A.C.

In addition to these six, all of whom have visited the college during the past year, two more have agreed to come at some time in the future.

In economics and business administration —

Frank C. Pierson, A.B. (Swarthmore), Ph.D. (Columbia University). Professor of Economics at Swarthmore. Formerly assistant bank examiner, Federal Reserve Bank of New York, economic research assistant, special arbitrator and regional vice chairman of the National War Labor Board, consultant for the Wage Stabilization Board, Director Carnegie Corporation Survey of Business Education. Author of several books on collective bargaining and labor relations.

In social sciences —

David Riesman, A.B., LL.B. (Harvard), LL.D. (honorary, Marlboro College). Law clerk to Justice Brandeis; Professor of law, University of Buffalo; visiting research fellow, Columbia Law School. Deputy assistant district attorney, New York City; assistant to treasurer, Sperry Gyroscope Co. Professor of Social Sciences, University of Chicago; recently appointed Professor of Social Relations at Harvard. Member of the editorial board of The American Scholar and other periodicals. Author of various books, including The Lonely Crowd (1950), Constraint and Variety in American Education (1956).

APPENDIX B, Part 1

AN APPRAISAL OF THE FRANKLIN AND MARSHALL CURRICULUM

Name ____________________

Academic Major while at F & M ____________________ Present Occupation ____________________

If you are now enrolled or if you were enrolled in a graduate or professional school, what is (was) your area of concentration? ____________________

PART A

One phase of the Curriculum Study concerns the general (distributional) requirements which all students should meet. Please check the requirement under each of the following headings (1. through 9.) which you think should be in force at F & M.

1. **Foreign Language.** (Present requirement: four semesters in one language; through the third year level for majors in the Humanities Division)
   - ☐ a. Continue the present requirement
   - ☐ b. Proficiency requirement (rather than a specific sequence of courses in the selected language)
   - c. Second language required ☐ 1) Two semesters ☐ 2) Four semesters
   - ☐ d. More of one language required
   - ☐ e. No language requirement
   - ☐ f. Other If Other, please specify ____________________

2. **English Composition.** (Present requirement: English 11 (1 semester) and either English 12 or Humanities 12)
   - ☐ a. Continue the present requirement
   - b. No-credit writing clinic
     - ☐ 1) One semester ☐ 2) Two semesters
   - ☐ c. Two-semester course in composition
   - ☐ d. English 11 in Freshman year and a required second semester of composition in the Junior year
   - ☐ e. Other If Other, please specify ____________________

3. **Speech.** (Present requirement: One two-hour course; this is usually Pu 20)
   - ☐ a. Continue the present requirement
   - ☐ b. Proficiency test; remedial clinic for those who do not pass this test
   - ☐ c. Additional semester in speech
   - ☐ d. No speech requirement
   - ☐ e. Other If Other, please specify ____________________

4. **Mathematics.** (Present requirement: Optional as one of two required courses in the natural sciences)
   - ☐ a. Continue the present requirement
   - b. Mathematics required for all
     - ☐ 1) One semester (four hours) ☐ 2) Two semesters (four hours each semester)
   - ☐ c. Other If Other, please specify ____________________

5. **Natural Sciences.** (Present requirement: Two two-semester courses; one of these may be mathematics)

☐ a. Continue the present requirement

b. General science survey course (for students majoring in areas outside of the Division of Mathematics and the Natural Sciences).

☐ 1) Two semesters ☐ 2) Four semesters

☐ c. A two-semester course in physics or chemistry, plus a two-semester course in geology or biology.

☐ d. One-semester courses in each of four natural sciences

☐ e. Other If Other, please specify ____________________

6. **Humanities.** (Present requirement: None)

☐ a. Continue the present curriculum arrangement

b. All students take Humanities course in the Sophomore year

☐ 1) One semester ☐ 2) Two semesters

☐ c. Required course in art

☐ d. Required course in music

☐ e. Required course in one of the following: Humanities, Art, Music

☐ f. Required course in one of the following: Humanities, English Literature, Philosophy

☐ g. Other If Other, please specify ____________________

7. **Social Sciences.** (Present requirement: Six semester hours in U. S. History or Government; six semester hours in one of the following: Economics, Sociology, or Psychology)

☐ a. Continue the present requirement

☐ b. Two-semester general survey course in the social sciences

☐ 1) Required ☐ 2) Optional

c. If (b.) has been selected, should the course deal with –

☐ 1) Contemporary civilization ☐ 2) History of the Western World

☐ 3) Other If Other, please specify ____________________

d. Should all students be required to take course work in one or more particular area(s) of the social sciences?

☐ 1) No ☐ 2) Yes If Yes, please specify ____________________

☐ e. Other If Other, please specify ____________________

8. **Religion.** (Present requirement: two semesters which may be selected from among several alternatives)

☐ a. Continue the present requirement

☐ b. A standard two-semester course required for all

☐ c. Choice of a two-semester course in either Religion or Philosophy

d. Required course during the Senior year in ethics or "great issues" –

☐ 1) One semester ☐ 2) Two semesters

☐ e. No requirement

☐ f. Other If Other, please specify ____________________

9. **Physical Training.** (Present requirement: two hours a week for the first three years of enrollment)

a. What physical sports do you now participate in:

____

b. Did you:

1) Participate in these sports prior to entering college?

☐ A. Yes ☐ B. No

2) Become interested in these sports because they comprised a part of the physical training program in college?

☐ A. Yes ☐ B. No

3) Participate in these sports while in college independent of the physical training program?

☐ A. Yes ☐ B. No

c. Should the physical training program emphasize:

☐ 1) Team sports (e.g., baseball, softball, touch football)? ☐ 2) Individual sports (e.g., golf)?

☐ 3) Both?

d. How many hours a week should physical training be required in the college program? ______
(Please specify the number of hours you think should be required for students in good health)

e. Through how many years should physical training be required?

☐ 1) All four college years ☐ 2) First three college years (present requirement)

☐ 3) First two years only ☐ 4) Freshman year only ☐ 5) No years whatsoever

f. Did you take part in intercollegiate athletics while in college?

☐ 1) Yes ☐ 2) No If Yes, please specify ______________________

PART B

Another phase of the Curriculum Study concerns the academic major. We will be interested in your opinion concerning each of the following topics.

1. Percentage of the Student's Program to be Devoted to the Academic Major

a. Was the percentage of courses which you took in your academic major at F & M –

☐ 1) Too large ☐ 2) Too small ☐ 3) About right

b. What percentage of the total college program should the major occupy? ______
(Please signify the most desirable percentage)

c. Should there be an upper limit placed upon the number of semester hours a student can take in his academic major?

☐ 1) Yes ☐ 2) No ☐ 3) No opinion

2. The Academic Major as Preparation for Your Career

a. Is your present occupation one for which your major prepared you?

☐ 1) To a great extent ☐ 2) Moderately ☐ 3) Slightly ☐ 4) Not at all

b. Would you advise others entering your occupation to take the same major you did?

☐ 1) Yes ☐ 2) No ☐ 3) No opinion

c. If you checked No in answer to (2b.), what major(s) would you recommend? ______________________________

____

d. Would you advise a student entering F & M who plans to prepare himself for the same occupation you selected to choose the same major you did?

☐ 1) Yes ☐ 2) No ☐ 3) No opinion

Please comment on your reasons for your answer. ______________________________

____

____

____

3. Honors Work and Independent Study

a. Did you do Honors Work?

☐ 1) Yes ☐ 2) No

b. If your answer to (3a.) was Yes, do you believe that your Honors Work was of –

☐ 1) Greater value than an equivalent number of hours of course work would have been?

☐ 2) Less value than an equivalent number of hours of course work would have been?

☐ 3) About the same value as an equivalent number of hours of course work would have been?

c. Opportunities for independent study other than Honors Work should be extended to:

☐ 1) All seniors with at least a B average

☐ 2) All seniors in good academic standing

☐ 3) All above the sophomore level who have a B average

☐ 4) All above the sophomore level who are in good academic standing

☐ 5) All students in good academic standing

☐ 6) No students other than those now eligible for Honors Work

d. Should the senior seminar be:

☐ 1) Continued on the present basis?

☐ 2) Discontinued?

☐ 3) Changed into an informal, non-credit course –

☐ A. for seniors only? ☐ B. for all majors?

e. Should the comprehensive examination be:

☐ 1) Continued on the present basis?

☐ 2) Discontinued?

☐ 3) Limited to Honors students only?

If you wish to elaborate on your answers to any of these questions, or if you have other ideas, recommendations, or suggestions about the curriculum, please write them on the accompanying blank sheet.

APPENDIX B, Part 2

Tabulation of

ALUMNI QUESTIONNAIRE (Class of 1955)

By major department

PART A

Question 1:
Foreign Language

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	4	-	1	3	8	16	3	1	-	3	4	1	2	7	1	3	5	4	58
b.	2	3	1	2	8	14	2	5	-	1	2	1	5	7	4	-	2	3	54
c (1)	-	-	-	1	1	5	1	-	1	-	1	1	-	3	1	-	1	-	15
c (2)	-	-	-	1	1	1	-	-	-	-	-	1	-	-	-	-	-	1	4
d.	-	-	-	-	-	2	-	1	1	-	-	-	-	1	1	-	-	-	6
e.	-	1	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	3
f.	-	-	-	3	3	2	1	-	1	1	1	2	[1]	2	[1]	1	1	-	15

Question 2:
English Composition

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	2	1	2	1	6	11	2	1	1	1	4	1	-	5	2	1	2	3	40
b (1)	-	-	-	-	-	3	-	-	-	-	-	-	-	3	-	-	-	-	6
b (2)	-	-	-	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	3
c.	-	-	-	1	1	2	2	-	1	3	2	2	-	2	-	1	4	2	26
d.	4	2	-	6	12	16	2	4	1	1	1	-	5	5	4	1	3	2	57
e.	1	1	-	3	5	4	-	3	-	1	2	1	3	3	1	1	-	1	25

Question 3:
Speech

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	2	1	-	3	6	17	3	4	-	2	3	1	2	6	4	2	3	2	55
b.	1	2	1	2	6	11	2	1	1	2	2	1	4	4	3	-	3	4	44
c.	1	-	1	5	7	9	1	2	2	2	2	-	-	5	-	1	3	-	34
d.	1	-	-	-	1	1	-	-	-	-	-	1	1	1	-	1	-	2	8
e.	1	1	-	-	2	-	-	-	-	-	1	-	1	-	-	-	-	2	6

PART A

Question 4: Mathematics

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	1	1	-	5	7	18	3	3	-	3	1	1	2	5	2	1	2	3	51
b (1)	-	1	-	-	1	7	-	-	1	1	2	-	1	3	2	-	2	4	24
b (2)	4	1	2	5	12	12	3	4	2	1	3	2	4	7	2	2	5	1	60
c.	1	1	-	-	2	2	-	-	-	-	2	-	1	1	1	1	-	-	10

Question 5: Natural Sciences

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	1	1	-	4	6	13	1	1	-	2	-	1	-	6	1	2	3	2	38
b (1)	1	2	-	1	4	4	1	2	-	1	-	-	1	3	3	1	2	3	25
b (2)	-	-	2	-	2	7	2	-	1	1	1	1	1	1	1	-	3	1	22
c.	-	-	-	1	1	4	-	2	1	1	5	1	2	3	1	1	1	2	25
d.	4	-	-	3	7	10	2	2	1	-	-	-	3	1	1	-	-	-	27
e.	-	-	-	1	1	-	-	-	-	-	2	-	1	2	-	-	-	-	6

Question 6: Humanities

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	-	-	-	2	2	3	1	2	1	1	1	-	1	2	1	3	1	1	20
b (1)	-	1	-	1	2	2	-	-	-	-	1	-	1	-	-	-	2	1	9
b (2)	2	2	-	3	7	15	-	3	1	3	1	-	1	5	4	-	2	-	42
c.	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	3
d.	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	1	-	4
e.	1	1	-	-	2	3	1	-	1	-	-	1	1	2	1	1	3	1	17
f.	1	1	1	4	7	16	4	2	-	1	5	1	3	5	-	-	3	5	52
g.	2	-	1	-	3	1	-	-	-	-	-	-	2	5	2	-	-	-	13

PART A

Question 7:
Social Sciences

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	6	1	1	9	17	25	4	6	2	4	5	-	6	10	2	-	7	7	95
b(1)	-	2	1	-	3	11	1	-	1	-	2	1	1	4	4	3	1	-	32
b(2)	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	1	-	4
c(1)	-	1	-	-	1	10	1	-	-	-	2	-	1	1	1	3	2	-	22
c(2)	-	1	-	-	1	2	1	-	-	-	-	1	-	2	2	-	-	-	8
c(3)	-	2	1	-	3	1	-	-	-	-	-	1	-	1	-	-	-	-	6
d(1)	-	-	1	-	1	6	1	-	-	-	1	1	-	1	-	3	1	-	15
d(2)	-	1	-	1	2	4	-	1	1	1	1	2	1	2	1	-	-	1	17
e.	-	1	-	-	1	2	1	1	-	-	1	-	2	1	2	-	-	-	11

Question 8:
Religion

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a.	3	-	1	5	9	25	2	4	-	1	2	1	3	9	1	2	4	5	68
b.	-	-	-	-	-	2	-	-	1	3	1	-	-	2	4	-	2	1	16
c.	2	1	1	2	6	9	1	2	1	1	2	-	2	2	2	-	3	-	31
d(1)	-	-	-	1	1	5	2	-	-	2	1	-	1	1	-	-	-	2	15
d(2)	-	-	-	1	1	2	1	-	-	1	-	-	1	-	1	-	1	-	8
e.	1	2	-	2	5	-	-	-	-	-	1	2	1	-	-	2	-	-	11
f.	-	1	-	-	1	-	-	1	1	-	1	1	-	2	1	-	-	1	9

PART A

Question 9:
Physical Training

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
c (1)	1	-	-	3	4	6	1	-	1	1	1	-	1	4	2	-	2	3	26
c (2)	-	2	-	2	2	7	2	1	1	2	2	1	1	-	-	-	-	2	21
c (3)	5	2	2	7	16	23	3	6	1	2	5	1	5	10	5	3	6	3	89
d: 1-2 hr.	3	2	1	5	11	20	3	6	2	2	2	1	5	6	6	3	5	3	75
d: 3-4 hr.	3	1	-	3	7	13	2	1	-	1	3	-	1	4	1	-	2	2	37
d: over 4 hr.	-	-	-	2	2	1	1	-	-	1	2	-	-	1	-	1	1	-	10
e (1)	-	1	-	1	2	10	-	-	-	1	2	-	2	3	1	-	3	1	25
e (2)	3	1	-	5	9	12	3	2	1	1	2	-	4	3	4	3	2	2	48
e (3)	3	1	1	3	8	12	2	4	2	2	4	1	1	6	2	1	2	1	48
e (4)	-	-	-	1	1	2	1	1	-	-	-	-	1	1	-	-	1	1	9
e (5)	-	1	1	-	2	1	-	-	-	1	-	2	-	1	-	-	-	3	10

PART B

1. Percentage of Major in Program

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a (1)	1	-	-	1	2	14	-	-	3	1	1	-	1	1	-	-	-	-	23
a (2)	1	2	1	3	7	-	1	1	-	1	2	2	-	3	3	3	3	1	27
a (3)	4	4	1	6	15	23	5	6	-	3	5	1	6	11	4	1	6	5	91
c (1)	2	1	1	3	7	11	2	4	-	4	2	1	5	7	1	-	6	1	51
c (2)	3	2	1	5	11	21	2	3	3	1	6	2	3	8	5	3	2	5	75
c (3)	1	1	-	2	4	5	1	-	-	-	-	-	-	1	1	1	1	-	14

2. Major as Preparation for Career

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
a(1)	4	1	2	1	8	24	3	-	1	3	3	-	5	4	4	2	2	4	63
a(2)	1	2	-	7	10	7	1	3	-	-	1	2	1	4	2	2	4	1	38
a(3)	-	1	-	2	3	4	1	2	1	1	-	1	1	6	1	-	-	1	22
a(4)	1	-	-	-	1	2	1	1	1	-	4	-	1	2	-	-	1	1	15
b(1)	6	1	1	4	12	22	4	4	-	3	5	1	2	10	6	2	4	6	81
b(2)	-	3	1	3	7	12	2	-	3	-	1	1	3	3	1	1	1	-	35
b(3)	-	-	-	2	2	3	-	2	-	1	2	1	1	3	-	-	1	-	16
d(1)	6	2	1	5	14	23	4	6	-	3	6	2	2	7	6	2	6	4	85
d(2)	-	2	1	3	6	10	2	-	3	-	1	-	3	3	1	1	1	1	32
d(3)	-	-	-	2	2	3	-	1	-	-	-	-	3	4	-	-	1	2	16

3. Honors Work and Independent Study

	Accounting	Distribution	Finance	Ind. Mgt.	Business Admin.	Biology	Chemistry	Economics	Education	English	Geology	German	Government	History	Philosophy	Physics	Sociology	Miscellaneous	TOTALS
c(1)	-	1	-	2	3	6	1	-	-	1	2	-	2	4	2	2	3	1	27
c(2)	2	-	-	2	4	6	1	1	1	-	1	1	-	1	2	-	2	1	21
c(3)	3	1	1	2	7	4	2	2	-	2	3	1	-	2	-	1	-	1	25
c(4)	1	1	-	1	3	10	-	-	2	-	-	1	2	5	3	-	1	1	28
c(5)	-	-	-	1	1	11	1	1	-	-	2	-	2	-	-	1	3	-	22
c(6)	1	-	1	1	3	1	-	2	-	1	-	-	1	-	-	-	-	1	9
d(1)	3	1	1	4	9	21	3	4	-	3	6	2	6	8	4	2	7	4	79
d(2)	1	-	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	3
d(3)A	1	1	-	4	6	3	1	1	2	1	-	-	-	2	2	1	-	1	20
d(3)B	1	1	-	1	3	11	2	1	1	-	2	1	-	2	1	1	2	-	27
e(1)	2	4	1	7	14	35	5	4	3	3	7	2	6	9	7	2	8	3	108
e(2)	3	-	1	1	5	1	1	2	-	-	1	1	1	2	-	2	-	-	16
e(3)	-	-	-	1	1	1	-	-	-	1	-	-	-	-	-	-	1	1	5

APPENDIX C

Professor Peyre on Foreign Language

The following questions were suggested to Professor Peyre as points which are under discussion in regard to our foreign language program. His notes in response to them are given after each question.

1. Can a system of proficiency tests be worked out for assigning students to their proper level in language study? Are the Achievement Tests of the College Board effective instruments for this purpose? If not, what should such tests be like?

1-A. I would recommend extreme caution with regard to home-made proficiency tests in language achievement. Measurement of achievement in any skill is a difficult and delicate matter; unless there is someone on the language staff who has had long experience with the professional techniques of testing, it will be better to make use of the standard tests now in existence. The CEEB score, plus a score on a listening comprehension test (either the Board's or the COOP Test) will give reasonably accurate placement information. In addition, a 2-week trial period in class, in which assignment to a different level is still possible, is strongly recommended. The Board has listening tests in French, Spanish, German. They are expensive. The COOP test is only in French; its cost is roughly 1/3 or 1/2 that of the Board's, but the same information is obtained. [COOP: Cooperative Testing Division, Educational Testing Service, 20 Nassau St., Princeton, N.J.]

2. If we should adopt a three-term, four-course program, there would be 12-15 hours per week of the student's time available for each course. Assuming that this time could be distributed in any desired way among classroom, laboratory, and study, what is the best use that can be made of it? Would the distribution of time differ with the level of the course?

2-A. At the beginning, 1/2 to 2/3 of time should be in class, the remainder divided about evenly between laboratory and homework. In each successive term, class time can be gradually diminished, laboratory and homework time increased. When free to choose length of laboratory period, students seem to prefer about 45 minutes.

3. Is work in the language laboratory to be considered an extension of classroom time, or as organized homework? Should it be supervised? If so, by whom?

3-A. Laboratory time should be considered an extension of classroom time. It should be supervised by someone who can handle the technical matters, and if possible, language problems; this last is by no means indispensable. The most difficult problems in connection with laboratory are: integration of class work and laboratory work; identification of one individual who will accept responsibility for smooth functioning of the laboratory-classroom relationship.

4. Granted the type of program mentioned in 2 above, could we prepare beginning students in five terms so that they could profit by a sixth term course conducted in the language? If so, should all work, including the student's writing and examinations, be in the language studied, or only the classroom lectures and discussions?

4-A. English must be removed from the language course from the start, otherwise it is not a course in language learning. This does not mean that English cannot be used at all, but it does mean that it is to be used only within the most rigid limits. Most college language courses fail, when they do, on precisely this issue. And it is not because the students cannot perform adequately in the new language, but because the naive instructor thinks they cannot. The correction of this fault must begin in the teacher's head.

5. Under the three-term, four-course program, what is the best kind of course for the 6th term unit: a general culture course, a literature survey, or a free choice among a group of advanced courses?

5-A. None of these suggestions is very wise. Unless a "culture" course can include a perspective of culture as the cultural anthropologist sees it, it had better not be attempted. Today's students are entitled to know more about culture in its broadest sense than is to be found in literature. A survey course should not be given until students have made a fairly thorough study of at least a few landmarks, appreciated for their own sake without reference to the larger setting in which they occur. Before going on to more advanced courses, it would be better to offer in the 6th term a study of representative writings of the present or recent past in which the needs of the two types of students are kept in mind: "technical" knowledge of the kind required for the future specialist in literary analysis and "general" knowledge of the kind useful to the student whose orientation in further studies is towards another area.

APPENDIX D

MEMORANDUM 29 September 1958

TO: Curriculum Planning Committee

FROM: Hugh A. Gault

Imprecise meanings for the terms liberal arts, fine arts, and the humanities make trying to place music in one, two, or all of these categories meaningless unless there is some sort of agreement in definition of these terms. If the humanities deal with the cultural activities which distinguish man from the lower orders of the animal kingdom and the transmission of them from one generation to another, then music is certainly a part of the humanities: in every culture music has figured prominently in the life of the complete man, and perhaps at no time more than the present has music been such an integral part.

To consider the term liberal arts in a broad sense (including, for instance, the natural sciences), and in its historical meaning with the Trivium and the Quadrivium, as referring to academic or collegiate training rather than technical or professional training, is unquestionably to include music as a liberal arts subject. And it is in this context that the Music Department suggests the role of music at Franklin and Marshall College be made commensurate with its importance in a truly liberal arts education.

On the other hand, music as a fine art does not merit serious attention on this campus at this time, since the fine arts deal with the creative aspect and acquiring skills of composition. While this may have some value in the visual arts (presumably little knowledge in the intellectual sense is required to apply pigment to canvas when we display in our galleries of art the efforts of primitives — and of chimpanzees), and in the literary arts (where techniques are not wholly new, since the student has had words as tools since childhood), few students are conversant enough with the technical language of music to make a creative course valid as any kind of academic requirement.

There exists such confusion over what "studying music" means — an inclusive phrase, if there ever was one — that it might be relevant to point out three different facets of the study of the tone art:

1) The study of harmony and counterpoint, as an example, is a composition course, and is analogous to a course in drawing, or to a

course in creative (literary) writing, and thus, having to do with acquiring a skill, may be considered a fine art.

2) The study of music as a part of man's being (under such labels as Introduction to Music, Appreciation of Music, History of Music) has its counterpart in an art history course, or in the many literature appreciation courses, broken down into periods, styles, and nationalities. (If there is a course in Shakespeare, should there not be one in Beethoven, and if there are courses in the novel and in the classical age of poetry, should there not be courses in the baroque suite and in the classical symphony? Yet we speak of studying just music, including everything and everybody connected with organized sound in the tone art since the dawn of civilization. To too many people there is no difference between the research and enlightened writing of Alfred Einstein and the boy across the street who is "studying music" because he bought an accordian and got ten free lessons thrown in.) A course dealing with the literature of music, its composers, and its interpreters is surely a liberal arts course.

3) The third aspect of music involves performance, and thus has no analogy in visual art, although the actor in the field of literature is the obvious parallel of the performing musician. The lines seem to be most sharply drawn in the literary world, where no one expects an actor to be a novelist or a playwright, or even necessarily a student of literature (although being a creator or a scholar needn't hinder him as a performer). The performing musician — he who is primarily concerned with applied music — in like manner may not be a composer (in fact, he rarely is), and may be a long way from being a musicologist. Applied music in group organization (choirs, glee clubs, orchestras, bands) sometimes has as little to do with the study of music as a liberal art as playing a part in No Time for Sergeants or Where's Charley? has to do with the study of literature.

Clyde A. Holbrook, in the chapter on music in a 1958 report entitled The Humanities at Oberlin, states the case succinctly: "The general liberal arts student, of course, is not concerned with the special values that music has for the professional. He studies it, not for the pleasure and profit that comes from entertaining others, nor for the acquisition of the techniques of artistic creation for their own sakes, but for the enrichment of his personality."

The specific recommendation here is for an alternative requirement similar to that at Amherst, where all applicants for the B. A. degree must take one semester course from each of three groups, or two semester courses from one group and one from either of the others. The three groups are:

a) Philosophy, Religion, Classical Civilization
b) Music, Fine Arts, Dramatic Arts
c) English or foreign literature.

APPENDIX E

Class of 1958. Average hours taken in various subjects.

Major	No. of Majors	Units	HUMANITIES												SOCIAL SCIENCE						SCIENCE AND MATH						Bus. Admin.	ROTC
											Romance Lang.												Natural		Physical			
			Drama and Art	Classics	Eng.	Ger.	Hu.	Mu.	Phil.	Re.	Fr.	Sp.	Russ.	Pu.	Ec.	Ed.	Gov.	Hi.	Psy.	Soc.	Ast.	Ma.	Bio.	Geo.	Chem.	Phy.		
Accounting	21	127.6	.4	.2	7.9	2.3	2.1	.1	2.1	6.1	1.7	7.7	.8	2.3	10.0		1.9	6.1	1.3	2.1	.1	8.0	1.1	5.7	1.7	.2	52.4	2.8
Biology	38	126.2	1.3	.1	6.7	9.7	5.4	.9	2.4	6.1	4.4			2.0	1.3		3.2	4.2	3.5	3.6	.6	8.2	29.3	.7	24.0	8.1		.5
Chemistry	19	132.5	.4	.2	8.1	9.8	2.4	.2	2.3	6.1	3.0			2.0	1.9	1.1	1.9	5.9	3.2	3.5	.2	13.7	10.6		45.7	8.6	.3	1.3
Distribution	5	125.8	1.0		11.4	3.6	1.8			6.6	7.4	6.0		2.0	14.4	2.0	4.8	5.4	1.2	2.8		7.8	1.6	6.4	.8	.8	36.8	1.2
Economics	6	122.0	.5		9.8	3.0	2.5		2.2	6.0	4.0	6.0		2.0	28.5	.5	5.3	9.8	1.0	5.0		10.7	1.3	4.0	2.7	1.8	15.0	.3
Education	13	130.3			14.5	3.7	2.5	1.4		6.2	2.8	5.5	.5	2.2	2.5	21.2	3.7	11.4	4.2	4.4	.5	8.7	12.2	2.9	9.2	4.3	1.4	4.4
English	15	126.7	.1	.5	40.2	5.9	5.6		6.8	6.7	9.4	1.8		2.5	2.4	1.4	4.2	6.3	2.4	3.4		5.6	6.1	3.7	5.1	2.1	2.6	2.4
Finance	9	124.0			9.3	1.3	1.0		1.0	6.0	1.3	10.3		2.2	24.7	.3	1.6	7.7	1.0	1.3		7.4	2.6	5.3			37.9	1.7
Geology	12	131.8	.7		8.7	7.0	4.5		1.9	6.0	2.2	3.2		2.2	1.7	.2	1.5	5.5	1.7	6.0		11.1	.7	41.2	17.0	7.8		1.0
Government	11	123.3	.3	.7	11.2	4.4	5.2	.3	4.5	6.2	3.8	6.3	1.6	2.0	4.6	.8	29.1	9.7	1.9	6.8		7.0	4.7	4.6	1.8	.7	1.6	.9
History	22	126.7	1.5	2.3	11.5	2.2	4.6		2.1	7.0	2.3	8.2		2.0	4.4	6.6	4.1	36.9	2.3	7.1		3.1	6.0	4.7	1.8		3.0	2.8
Management	20	123.1	1.3		12.2	5.1	1.2	.6	1.1	6.4	1.2	5.9	.6	2.5	16.1	.9	1.9	8.6	3.4	3.0	.2	7.8	.9	5.5	3.0	.6	30.3	3.1
Mathematics	11	126.9	1.6	.5	9.0	9.1	3.5		3.6	7.0	4.9			2.5	4.6	.4	1.4	5.5	2.7	2.7	.8	37.0	5.8		15.1	9.5	1.6	
Philosophy	10	128.3	1.0	2.6	9.6	7.2	8.0	.5	22.5	7.4	4.5	3.6		2.2	1.8		3.6	6.0	7.1	3.9	.3	7.1	10.3	3.5	17.2	3.2	2.4	
Physics	13	134.3	1.2	.2	7.8	10.9	3.0		2.2	6.5	2.5	.5		2.2	3.7	.9	3.8	3.8	2.1	1.2	.2	27.2	1.2	.9	13.2	36.8		
Psychology	11	129.2	.5		8.4	7.4	5.4	.5	6.3	6.6	3.5	3.3	.5	2.2	2.2	1.4	5.9	4.3	28.9	7.9		7.9	9.4	1.4	7.3	3.5	1.1	3.0
Sociology	14	124.6	.9	1.4	9.3	2.8	2.6	.6	2.4	6.7	4.3	5.1		2.0	5.0	5.0	2.8	8.0	5.1	29.5	.4	5.4	4.9	6.0	2.0	.6	4.1	6.9

APPENDIX F

FRANKLIN AND MARSHALL COLLEGE
Lancaster, Pennsylvania

Department of Psychology

December 12, 1958

Dr. W. Nelson Francis
Chairman:
Curriculum Committee

May I respectfully request that the introductory course in psychology (Psychology 21) be grouped with the introductory courses in biology and geology so that it may serve as one of the alternatives in the proposed pattern of offerings in the natural sciences?

The first course in psychology properly belongs in such a grouping since psychology, the science of the behavior of organisms, is a branch of natural science.

This branch of natural science is one of the more recent branches, but the substantial existing body of verified, communicated, and systematically interpreted facts attests to the dignity of its membership.

For many years, the first course in psychology at F and M has been taught in such manner as to give the student a careful account of the methods and core areas of contemporary psychology as well as of the theoretical interpretations of the major problems within these core areas. Thus, except for the lack of laboratory experimentation, the introductory course in psychology has been taught in a manner fully comparable to that obtaining in other natural sciences.

In the first semester of the academic year, 1959-1960, laboratory facilities will be made available to students in the first course. With the addition of these facilities, the lecture and discussion approach to the methods and core areas of psychology will be supplemented by and integrated with laboratory work on these topics. At that time, the first course in psychology will be placed on an equal footing with the other introductory courses in the natural sciences at F and M.

With the addition of the first course laboratory to the introductory course, it will no longer be equivalent in manner of presentation to the social science courses with which it is now grouped in the proposed pattern of courses in the social sciences.

Some remedy must be sought which will not weaken the content of this laboratory science course and which will not force it into unfair competition for students with several social science offerings. To my thinking, institution of the recommendation made in the first paragraph would be the best remedy.

Respectfully submitted,

/signed/

Arthur E. Harriman
Associate Professor of Psychology

APPENDIX G

25 November 1958

SUBJECT: Inter-Departmental Major in American Civilization

TO: W. Nelson Francis, Chairman, Curriculum Planning Committee

1. The Committee appointed by you in your memorandum of 22 October 1958 to discuss the possibility of an inter-departmental major in American Civilization submits its report in the paragraphs that follow.

2. In view of its discussions and considerations and its investigations of programs in American studies conducted at selected colleges, the Committee submits two curricula for the consideration of the Curriculum Committee. The first suggestion incorporates courses listed in the current catalog for the sessions 1958-1960; the second suggestion proposes several new courses to be supplemented with courses from the present offerings.

3. The curriculum based on current offerings follows:

(a) Required of all majors *(3 courses - 9 hrs.)*

Gov. 11 - American Government
Gov. 55 - American Political Thought
Hi. 14 - History of the United States since 1865

(b) Choose either of the following (2 courses - 6 hrs.)

Ec. 21-22 - Principles of Economics
Soc. 21-22 - Introductory Sociology

(It is suggested that the student offer the course not selected here as a course to satisfy the general college requirements.)

(c) Choose two of the following courses (2 courses - 6 hrs.)

Eng. 40 - Modern Drama
Eng. 75 - American Literature to 1860
Eng. 76 - American Literature to 1900
Eng. 80 - Contemporary American Literature

(d) Choose two of the following courses (2 courses - 6 hrs.)

Cl. 15-16 - Greek and Latin Elements in English
Ec. 35 - Comparative Economic Systems
Ec. 61 - Financial Institutions
Ec. 62 - Money and Banking

(d) Choose two of the following courses (cont'd.)

Ec. 63 - Public Finance
Eng. 41 - Structure of the English Language
Gov. 24 - Introductory Public Administration
Gov. 26 - State and Local Government
Gov. 31 - Government and the Economy
Hi. 23 - History of England
Hi. 25 - Special Projects in American History
Hi. 35-36 - History of American Foreign Relations
Phil. 35 - Philosophy in America (Only with the permission of the instructor)
Soc. 31 - Rural and Urban Societies
Soc. 36 - Race and Culture Relations

(e) A Seminar, Problems in American Civilization (2 courses - 4 hrs.) would need to be introduced. This seminar should be planned by an inter-departmental committee and should be offered by instructors from the several departments involved.)

4. The program suggested in paragraph 3 requires 31 hours to fulfill the major. This appears to be an excessive number of hours for a major. It may be pointed out, however, that several of the courses can be used to fulfill general requirements, that a number of the courses come within the range of electives.

5. The Committee feels that the curriculum set forth in paragraph 3, based on current course offerings, is weak, lacks depth — indeed, has little merit. The courses included in the program have, in large measure, been planned for purposes other than American studies as such — they may be courses of general culture, special courses tailored to the needs of subject fields. The Committee, therefore, proposes the curriculum set forth in paragraph 6 below, wherein it proposes several new courses to be supplemented with courses from the current offerings.

6. The second proposal, including new courses, follows:

(a) Required of all majors (2 courses - 6 hrs.)

Social and Intellectual History of the United States.
A new course.

(b) Choose three of the following courses (3 courses - 9 hrs.)

Ec. — Economic History of the United States
A new course. 3 hrs.
Gov. 55 - American Political Thought

(b) Choose three of the following courses (cont'd.)

Hi. 25 - Special Periods in American History
Re. — Religion in the United States
A new course. 3 hrs.
Soc. — The Structure and Functioning of American Society. A new course. 3 hrs.

(c) Choose two of the following (2 courses - 6 hrs.)

Eng. 40 - Modern Drama
Eng. 75 - American Literature to 1860
Eng. 76 - American Literature to 1900
Eng. 80 - Contemporary Literature (American)
— Fine Arts in the United States
A new course. 3 hrs.
Phil. 35 - Philosophy in America (Only with the permission of the instructor.)

(d) It is strongly recommended that either Ec. 21-22 or Soc. 21-22 be offered to fulfill general college requirements.

(e) Choose two of the following courses (2 courses - 6 hrs.

Cl. 15-16 - Greek and Latin Elements in English
Ec. 35 - Comparative Economic Systems
Ec. 61 - Financial Institutions
Ec. 62 - Money and Banking
Ec. 63 - Public Finance
Eng. 41 - Structure of the English Language
Gov. 11 - American Government
Gov. 24 - Introductory Public Administration
Gov. 26 - State and Local Government
Gov. 31 - Government and the Economy
Hi. 31 - History of England
Hi. 35-36 - History of American Foreign Relations
Soc. 31 - Rural and Urban Societies
Soc. 36 - Race and Culture Relations

(f) A Seminar. Problems in American Civilization (2 courses - 4 hrs.) would need to be introduced. This seminar should be planned by an inter-departmental committee and should be offered by instructors from the several departments involved.

7. The Committee feels that the new courses suggested in paragraph 6 are essential to a program in American Civilization. In view of the deficiencies of the program set forth in paragraph 3, the new courses will provide the needed content, discipline, and challenge for the major.

(a) The Committee wishes to point out that the new courses will provide problems of staffing and perhaps will require recruitment of additional faculty personnel.

(b) The Committee wishes to point out further that the inter-departmental seminar will provide special problems in staffing, development of content and problems for investigation, and drawing up the comprehensive examinations. Some of the members of the Committee are especially concerned about the integrity of courses conducted by several instructors from several departments. Sometimes, the members of the Committee indicate, compromise and expediency prevail at the expense of high standards, excellence of content, as well as thoroughness of instruction.

(c) The Committee would like to recommend that if these courses are not offered for an American Civilization sequence, they be considered as additional offerings in the departments concerned; for example, Religion in the United States, by the Religion Department; Economic History of the United States, by the Economics Department; Structure and Functioning of American Society, by the Sociology Department.

(d) The Committee is of the opinion that the course Social and Intellectual History of the United States is particularly valuable. Whether it be offered as a required course for an American studies major or as a new course in the present curriculum, the Committee feels the course to be essential. The committee is divided as to who shall offer it. These three possibilities are suggested:

(1) That one of the departments offer the course. It is indicated that conventionally the course is offered by the History Department.

(2) That the course be a joint effort of several departments in the manner of the present Humanities course. Here several persons representing several departments draw up the course and a manual that is then used by teachers from several departments.

(3) That the course be an inter-departmental course in which several departments be responsible for segments of the course appropriate to them — the course would be conducted by several teachers with each presenting his speciality and/or with several teachers conducting symposia.

8. The Committee wishes to point out that submission of this report does not necessarily indicate that the individual members of the Committee endorse the idea of an inter-departmental major in American

Civilization. Frankly, the Committee is divided on the desirability and the practicality of offering the sequence as a major at Franklin and Marshall.

(a) On the one hand, members of the Committee hold the view that by their specialized studies in certain departments of language and literature, many of our students have a clearer understanding of the culture and values of the Germans, or the Spanish, or the French, than they do of their own civilization. On the other hand, one member of the Committee expressed this view: "An emphasis on 'American Studies,' while perhaps appropriate for a university with a large number of foreign students, elsewhere seems provincially nationalistic. It savors of American cultural inferiority complex and of American fears of Communist ideological competition. As such it would seem to be anachronistic."

(b) Again, it is pointed out that a program of American studies might be appealing to a large number of students wishing to major in social studies broadly rather than in a department. In answer to this it is maintained by several members of the Committee that the number of majors in economics and government is even now too few for efficient program operation; the proposed new major would make this situation worse.

(c) Some members of the Committee hold that general principles, often universally obtaining, may be made more evident by specific reference to the American scene. In opposition to this, the view is offered: American studies "would tend to force artificial nationality emphasis in dealing with subjects the principles of which are more universal. For example, theoretical principles relating to national income determinations are the same for Italy as for the United States; and no doubt the principles governing urban development are the same in Copenhagen as in Philadelphia."

(d) Although a majority of the Committee approves the program drawn up in paragraph 6, one member raises a question about the appropriateness of Cl. 15-16, Eng. 41, and Hi. 23 among the electives. One member raises a question about the requirement of two courses devoted to American art and literature; he points out only one course should be required to avoid "too heavy an emphasis on art and literature." Two members feel strongly that the program is weighted too heavily in favor of the social sciences, that there should be more requirements from the humanities.

9. In conducting this investigation, and in proposing two curricula — one, based on the present course offerings; another, suggesting several

new courses to be supplemented with courses from the present offerings — the Committee has, we believe, fulfilled its mandate "to discuss the possibility of an inter-departmental major in American civilization . . . feasible with our staff and facilities."

10. The members of the Committee feel deeply that in developing area courses or new "specialized" courses an effort should be made to develop a program of courses in harmony with the spirit of Franklin and Marshall, appropriate to its facilities, the needs of its students, above all, to the temper of its faculty. The Committee hopes that such a program may be found so that F and M may be identified with it as favorably as is Amherst with its American Studies, Dartmouth with its Great Ideas, St. Johns with its Great Books. For such additional investigations the members of this Committee offer their services as the Chairman of the Curriculum Planning Committee sees fit.

Respectfully submitted,

Luther Binkley
Robert Eshleman
Fred Klein
David McCalmont
Sidney Wise
Elias Phillips, Chairman

APPENDIX H

Excerpts from

ATHLETICS AND PHYSICAL EDUCATION AT HAMILTON COLLEGE

INDIVIDUAL DEVELOPMENT PROGRAM

I Program: During their first three years in residence all students participate in a required physical education program. This requirement calls for three periods per week on three different days.

The program is based on the theory that it is as important to develop a good physique and a love of sport in the average man as it is to provide scope for the brilliant athlete in the intercollegiate program.

II Suiting the Program to the Student: In order to discover the needs of the individual, each student is tested at the beginning of his College career. The type of program pursued by each student is determined by his performance in these tests.

III Medical Examination: All new students are examined during Freshman Week by the College physicians. Men in whom the medical examinations disclose organic defects or functional disabilities enter an individualized program approved by the College physician and administered by the Department of Physical Education. The aim here is to develop the abilities of such men to the point where they can enter the regular program or at least that part of the program that their physical condition permits. We strive for some participation in "carry-over" sports for all students.

IV Primary Tests: Four tests are given to those who qualify in the medical examination. These are: swimming, physical fitness, outdoor carry-over sport, and indoor carry-over sport.

They are designed to test the fundamental skills and physical development required by the department. The physical test is not a difficult one. It is premised on the theory that at least this amount of muscular development is necessary to play the games required without undue fatigue.

1. Physical Fitness Test: Physical fitness tests are given during the first week of the term at the first regular assigned class period. It consists of 12 push-ups, 28 sit-ups, 30 squat jumps, 3 chin-ups using front grip, and a 440 yard run in 80 seconds.

2. Outdoor Carry-over Sport Test: A student at the second class period has a choice of either a tennis or golf test. If he feels that he does not have sufficient skill, he indicates at this time the sport in which he will want instruction. Those who fail the test meet at regular class hours for instruction.

   (The third period of the first week is given over to an orientation lecture on football and soccer. We feel that the intelligent spectator derives more enjoyment from the games he watches.)

   This is also done before the winter and spring sports seasons so that hockey, basketball, lacrosse and baseball are covered.

At the close of the fall sports program, classes move indoors. At that time two tests are given:

3. Swimming Test: The test consists of: 25 yard breast-stroke; 25 yard backstroke; 25 yard side stroke; 100 yard free style; treading water for 30 seconds using feet only.

   Every effort is made to bring all students up to at least this standard of performance before graduation. To use the pool for recreational swimming, a student is required to swim at least 100 yards.

4. Indoor Carry-over Sport Test: The student may choose from among squash, handball, badminton and ice skating. He may not feel qualified to take the test so he indicates his choice for instruction. Again those who fail the test are given instructions at class time.

V Nature of Tests: Without discussing at length the necessary subjective nature of the proficiency tests, it may simply be remarked that the general objective is to develop sufficient skill and knowledge of the games for enjoyment and unselfconscious participation.

VI Team Carry-over Sport: On inclement days during the fall period, volleyball is taught and played. We feel that it is the one team game that has a great deal of carry-over value and therefore want all students to have the fundamentals and some play.

VII Class Instruction: Beginning the second week in the fall, instructional classes in golf and tennis begin for those who have not demonstrated proficiency in one or the other of these sports. A student may be proficient in one sport and desire instruction in the other. This is encouraged as is further instruction beyond mere proficiency; the latter is arranged for by appointment.

Varsity candidates for team sports are not excused from proficiency requirement.

Students who qualify in all tests enter Physical Education 5-6. Those who have a proficiency in one or more of the requirements but not all, qualify for 5-6 during the period that the skills that they are proficient in are being taught; at other times they attend at regular class hours.

VIII Physical Education 5-6:

ATTENDANCE:	All men shall engage in at least thirty (30) minutes of actual exercise exclusive of showers and dressing, three (3) periods a week on three (3) different days.
ABSENCE:	During a semester, juniors are allowed six (6) absences from Physical Education, sophomores four (4), and freshmen three (3). An undergraduate who exceeds his allowance of absences in a given semester is dropped from the course for that semester.
TIME:	Monday through Friday from 9:00 AM to 6:00 PM and on Saturdays from 9:00 AM to 12:00 noon. Before engaging in an activity each student must report to the gymnasium office to check his attendance, activity and time of starting.
ACTIVITIES:	All activities for which facilities are provided shall be limited to the College grounds. The activities for the entire year include:
Golf:	Each man shall carry at least four (4) clubs and at least one (1) spare ball. Golf spikes must be put on in lower locker room.
Squash: Handball: Badminton:	All students using squash, handball or badminton courts should sign reservation sheet on bulletin board in hallway before playing. Reservations may be made twenty-four (24) hours in advance. Only white-soled shoes may be used in the squash and handball courts or gymnasium. (Crepe permitted.)
Skating:	Skates must be put on in tunnel connecting gymnasium and hockey rink.
Recreational Swimming:	To use the pool for recreational swimming, a student must pass the primary swimming test or be able to demonstrate that he can swim 100 yards.

Swimming (cont'd.)	A guard is on duty during the recreational swimming hours.
Tennis.	
Skiing.	
Boxing: Fencing: Wrestling:	After instruction has been given and upon approval.
Basketball:	Scrimmage with at least three (3) on a side.
Hockey, volleyball, touch football, softball and bowling:	credit for participation in these activities shall be limited to scheduled intramural games.
Running, hunting and fishing:	upon approval secured in advance.
Intercollegiate Squads: Intramural Games:	Membership on an intercollegiate squad and participation in intramural games will be accepted toward this requirement. However, juniors, sophomores and freshmen who have not passed their required tests attend their regular physical education classes. Intercollegiate or intramural participation is in addition to these required classes.

IX Periods of Instruction: Golf and tennis are taught in the fall (from the second week of the semester until the middle of November) and in the spring (from the end of spring recess to the end of the semester).

Swimming and indoor carry-over sports and conditioning exercises for those failing physical fitness are taught during the rest of the school year. Swimming instruction regardless of failure to qualify in indoor carry-over sports, comes first when instruction moves indoors. We feel that this arrangement should exist because swimming is not only a recreational skill but deals with safety as well.

At any time during the instruction period, an instructor may pass a student who has developed sufficient skill. He then follows the routine explained above.

APPENDIX J

Comments from Alumni, Class of 1955, who are now in Medical School, regarding their F & M Major

On the Alumni Questionnaire which was sent to the Class of 1955, the following question occurred: "Would you advise others entering your occupation to take the same major you did?" Three choices were offered: (1) Yes; (2) No; (3) No opinion. A further question asked for comments on the reasons for the answer selected.

From the replies of alumni now in medical school (or serving as interns), we have compiled the comments below. The first list contains the comments of those who checked (1) Yes — i.e., who would advise others to take the same major they did. All of the men in this first group majored in Biology.

1. The biology and chemistry courses were most helpful in preparing a solid foundation for the basic medical subjects.

2. I found myself extremely well prepared for my medical education.

3. (No comments)

4. For medicine, one is best prepared after taking the Biology major. The very important Humanities and Social Sciences, however, should be elected by the student even at the cost of carrying a large number of semester hours.

5. Excellent preparation for medical school. However, pre-meds should take more liberal arts of their choosing in place of the "highly recommended electives" such as physical chem, biochemistry, etc.

6. But:— should get more liberal Arts. — Don't decrease biology but add Arts. I think a pre-med should get a better background in humanities — the best courses are survey courses to open up the many opportunities to him. If he isn't at least introduced to them and had his appetite whetted, he will be too busy later with medical literature to start.

7. Anyone planning to enter the medical profession should have a strong science background. Chemistry and physics are extremely important as well as the biological sciences. (Most

7. (cont'd) medical students with a fine scientific background are starved for the liberal arts — advise the pre-med to cram in as much of the liberal arts as is humanly possible; he will be extremely thankful in later years.)

8. An almost absolute necessity for fulfilling medical school requirements. Perhaps a little more emphasis on the Humanities would be helpful.

9. However, there is too much specialization in the pre-medical curriculum. An attempt should be made to lighten the requirements of the major.

10. Granted Humanities etc. are very desirable for one to have, the fact still remains that Biology is the backbone of medicine. As a physician you are expected to know medicine inside and out, and the only means possible is more extensive training in Biology starting at High School level and continuing throughout college and medical school.

Just a short note to let you know that I am quite satisfied with the 4 years spent at F & M. I have had an excellent preparation for medical school and I accredit this to the study techniques etc. established at college. Many of my classmates came to medical school and had no concept of what studying really [entailed]. The entire Biology department directed my methods and guided me in the proper direction and as a result I adjusted quite easily to medical school life. I have been doing very well here at Boston University Medical School and I'm sure much of my success is due to the excellent 4-year background at F & M.

11. I feel I was well grounded in basic science material and this was of definite value. I would suggest more humanities — more courses out of the major field.

12. The pre-medical biology courses at F&M have been valuable to me as a medical student in that they covered in reasonable detail some material which is slipped over very quickly in medical school, thereby giving the student an added background that many others do not have.

I must first of all express the opinion that I have been very satisfied and proud of the education obtained at F & M. While in Jefferson Medical College I have watched the men trained at F & M attain positions of high academic standing and become the leaders in many of the classes. Since leaving F & M I have developed an increasing gratitude for the education and opportunities that were offered at Franklin & Marshall College.

12.
(cont'd) Being a medical student, I have followed and continued in my major in biology; but aside from this, one of the greatest assets acquired from F & M was that obtained from the English Department. I have long felt that some of the finest courses I took included the English Literature and particularly the Humanities course with Dr. Elias Phillips. I would strongly be in favor of having these courses become more of a requirement. I feel that the Humanities and Literature courses are of more benefit in the senior year when major requirements are for the most part fulfilled and there is more time for relaxed study in this field.

In reading medical journals and hearing doctors speak, it becomes increasingly evident that many would do well to have a better background in English Composition and public speaking. Realizing that the curriculum cannot be expanded endlessly, I would suggest having seminars available in these fields.

I have found that once a fundamental background has been attained in the major fields in college, these are expanded upon in graduate school. However, the English, Humanities and Social Sciences become neglected after one leaves college.

If I were to begin again in college, my one desire would be to take more courses in English and Humanities and allied courses . . . .

13. Better prepared for graduate school.

14. If interested in medicine, to biology naturally, usually, falls the area of greatest interest. But, the emphasis on chemistry is too great and although it allows intellectual gymnastics and a weeding-out of the less fortunate pre-meds, it is a sacrifice of too much time which could be spent to better use in rounding out a doctor's educational background.

A man with any major can go to medical school, the more liberal the background the better. [Take] the same major, but less time spent in it (especially all the hours in chemistry), and more time on courses for a well-rounded education.

15. I feel that majoring in biology prepared me best for medicine as it is the study of all forms of life.

16. (Although I answered Yes to [this] question, I believe a medical student should have more courses in liberal arts. The major I had in college prepared me for medical school; since then, I can appreciate the value of a more liberal education.)

I recommend the same major for medical school, but I would also recommend a greater variety of the liberal arts courses,

16. (cont'd) e.g. music, art, humanities, English Literature and Composition. Several of the science courses I had at F&M were repeated in medical school — hence I believe a student should try to obtain a "well-rounded" education while in college.

17. It is very likely that a medical student who has majored in Biology at F&M will profit because he has gotten (1) a broad background in basic medical science theory, and, to a lesser extent, medical terminology; (2) information directly applicable in the freshman year of medical school; and (3) valuable training in general science principles and laboratory techniques.

18. I found my first year of medical school very easy and I felt that the biology department had prepared me better than most fellows in my class had been prepared. I would advise any pre-med to go to F&M and be a biology major.

The following man checked (1) Yes — that he would advise others to take the same major he did. His major was Philosophy.

19. Medical students in general lack sufficient background in the fields of liberal arts. No one given a college education should be permitted to graduate without such a background. There are two, not one, goals of higher education:

(1) preparation for career
(2) broadening of the scope and understanding of life and the world.

* * *

The list below contains the comments of men of the Class of 1955, now in medical school who checked (2) No — i.e., who would not advise others entering their occupation to take the same major they did. All of the men in this group majored in Biology.

20. I was well trained (over trained) in the scientific fields — especially chemistry. A physician needs broad, general knowledge — leave the basic science training to medical school. Hence, if I had it to do over again, I would elect more philosophy, religion, history, Humanities, etc.

F & M commands much respect among medical schools and medical students for being a college with an excellent pre-medical

20. (cont'd) program. However, I realize one shortcoming of F&M when I talk with various classmates in my medical school who were philosophy, politics, economics, history, psychology, etc. majors in their respective colleges. I was overtrained in the scientific courses and as a result neglected to receive a "well-rounded" education.

(This alumnus then itemized his suggested program in science, which would total 56 hours of science, and which he said would leave 64 hours for liberal arts requirements and electives. He commented that he had 72 hours of science at F&M, and "I wasted 8 credit hours on R. O. T. C. also".)

21. Although the science courses are good preparation for medical school, there was too little time for the Humanities. Many of these same courses are duplicated in medical school (e.g., biochemistry, physiology, anatomy). Since college is the last chance for a formal liberal education, it is the best place to provide a greater number of "well-rounded" physicians.

22. Medical school repeats many of the same courses that were required by the Biology major. To prevent needless duplication and to secure a broader education, one would do well to take another major.

23. Although a great many biology courses at F&M aided in my medical school academic life, I felt deficient in a literary and fine arts sense. Regrettably, a vast scientific knowledge in medicine is quite secondary to a pleasing and interesting personality!

24. It did make the transition to medical school easier, but I probably missed a lot of interesting subjects in unrelated fields which would do me just as much good now.

It [the choice] would depend a lot on the student. The biology major certainly is good preparation for the grind of first year medical school, but if the student has good study habits and no difficulty with scientific material, I would recommend that he take minimum entry requirements and major in whatever appealed to him.

25. College is the time for education in as universal a manner as feasible. College is not a prep school for any vocation. In my occupation, the scientific approach and the elementary scientific concepts, and "high school details" are all the preparation needed for medical school. But we must deal with the fears and aspirations of people from widely different backgrounds, which requires 70 adjustments every day, 70 slightly different

25. (cont'd) approaches to individuals. This demands a broad, deep base.

26. The minimal basic science requirements for medical school are adequate preparation. A liberal arts background would be superior since we will be treating people and certainly a good doctor-patient relationship is even more important than the science background which we all receive equally in medical school.

27. The pre-med required list of courses (chiefly Biology and Chemistry) almost necessitates becoming a Biology major, otherwise the academic load becomes extremely heavy and scheduling difficulties [result]. I consider it one of the great misfortunes of my study at F&M not to have had more time for electing other subjects, especially in the Humanities. However, I cannot deny that preparation and recommendations received from F&M played a great part in at least my acceptance to University of Pennsylvania School of Medicine, if not my further study there.

28. I do not feel that all the science courses helped me that much for medical school, whereas my deficiencies in the liberal arts courses are outstanding — with no opportunity at medical school to increase my general knowledge.

A good deal of time has elapsed since the time I originally filled out most of my questionnaire and I have given some thought to some of my original answers. On the whole I feel that I received a very good education at Franklin and Marshall, and most of my answers reflect a very personal feeling on my part. However, I very strongly wish I could have substituted some economics, political science, history, government and literature courses for a good bit of the required chemistry and biology, very little of which has helped me in medical school.

As I meet more people and fellow medical students, I realize that my education was very good in its limited field, but that many students at other colleges and universities had an opportunity to receive a more liberal education at the expense of the science end of the curriculum. When I entered Franklin and Marshall I was told that a pre-medical student did not necessarily have to major in biology, but that it was strongly advised as the major field. I wish now that I had not followed that advice, but had attained a more liberal education.

* * *

The following two men checked (3) No opinion, in response to the question whether they would advise others entering their occupation to take the same major they did. Both majored in Biology.

29. There are many liberal arts courses I would have liked to study further —, and yet, I do not feel that I had too much biology, either. Too bad marks are so strongly emphasized at F & M — so that a student can't carry a minor or two along with his major. Many overlap to a great extent, so that with wise choosing, I feel this could be done.

30. I would advise less emphasis on those subjects which will be offered in medical school, such as histology, physiology, physical chemistry, etc., and suggest that the individual try to obtain a broader education in the liberal arts — undergraduate school will be his only chance for this education to be presented formally. However, medical schools still favor those boys who stick closely to the biologic fields and it thus becomes mandatory to select courses which will better insure acceptance to medical school.

REQUIREMENTS FOR ADMISSION TO MEDICAL SCHOOLS (In Years of Study)[1]

	Chemistry				Biology						Mod. For. Language
	Inorg.	Org.	Quan.	Qual.	Gen.	Ana.	Embry.	Phys.	Ma.	Eng.	
Albany	1	1			1			1			
Boston U.	1	1			1			1		1	
Buffalo	1	1/2			1			1		1	
Chicago Med.	1	1/2	1/2		1			1		1	1
U. of Chicago	1	1	1/2	1/2	1	1/2		1	1/2		
Cincinnati	1	1			1		1/2	1		1	
Columbia (P&S)	1	1/2			1			1		1	
Cornell	1	1			1			1		1	
Duke	1	1			1			1	1	2	
Einstein (Yeshiva)	1	1			1			1	1		1
Georgetown	1	1			1	1/2	1/2	1		2	1
Geo. Washington	1	1			1			1		1	
Hahnemann	1	1			1			1		1	1
Harvard	1	1			1			1			
Howard	1	1			1	1/2			1	1	1
Jefferson	1	1/2			1			1		1	
Johns Hopkins	1	1			1			1			2
Louisville	1	1	1/2		1		1/2	1		2	
Maryland	1	1	1/2		1			1		2	1
Michigan	1	1			1	1		1		1	2
N. Y. Medical	1	1			1			1		1	1
N. Y. University	1	1			1			1		1	
Northwestern	1	1	1/2		1		1/2	1		1	1
Pennsylvania	1	1	1/2		1			1		2	
Pittsburgh	1	1	1/2		1		1/2	1		1	
Rochester	1	1			1			1		1	
Seton Hall	1	1			1	1/2		1		1	2
State U. of N. Y.	1	1			1			1		1	
State U. of N. Y. (Syr.)	1	1			1			1		1	
Temple	1	1			1			1		1	
Tufts	1	1			1			1			
Virginia Med.	1	1	1/2		1			1		1	
U. of Virginia	1	1			1			1		1	
Washington U.	1	1			1			1		1	
Western Reserve	1	1			1			1		1	
Yale	1	1			1			1			

(1) Admission Requirements of American Medical Colleges - (1958-1959)

APPENDIX L

Summarizing Conclusions Arising from Meeting with Dr. Frank R. Kille - 10 May 1958

The following is a summary of conclusions reached by Dr. Frank R. Kille, after studying our program of teacher preparation. Since this represents the substance of his thinking rather than his exact wording, nothing in this document should be quoted as emanating directly from him. It is understood that his comments and recommendations are expressly for use on our own campus, and should not receive wider circulation.

1. Liberal arts colleges like Franklin and Marshall should either do a thorough job of teacher preparation or get out of it entirely.
2. It is not necessary for such colleges to do all kinds of preparation; it is more important for them to do well what they do do. This probably means secondary school preparation only, and only in certain subject-matter fields. Dr. Kille endorsed the following recommendation made by consultant Paul Woodring for Carleton College:

   > The liberal arts college is best qualified to prepare teachers for the major academic areas: English, foreign languages, mathematics, the natural sciences, the social sciences including history, and music. A college such as Carleton has neither the facilities nor the desire to prepare high school teachers in vocational fields or specialists in such fields as guidance. If it attempts to do so it is departing from its traditions as a college of liberal arts.

3. Dr. Kille would recommend giving up the Speech and Hearing program, and devoting even summer institutes for teachers to in-service training in subject matter.
4. The Education Department should cease to press for inclusion of Education 21 in the social science distribution pattern. This might be permitted in a few cases under special dispensation.
5. Dr. Kille would recommend the experimental development by academic departments of a few methods courses in special subject fields, as alternatives to the general methods course.
6. He recommends closer contact between high school and college teachers in subject-matter fields, in discussion of their own fields.

This should be done on our campus, rather than by visiting the schools. He suggests conferences and dinners.

7. He suggests that there should be a thorough study of the State requirements and hours by the committee from the academic departments, in order to work out the best combinations for prospective teachers wishing certification in more than one subject.

8. We should continually present our views on certification requirements to the State Department of Public Instruction so that the Department may see clearly the specific ways in which general certification requirements work out on our campus. We should never hesitate to give them our own proposals. The State Department would probably welcome such efforts as evidence of deep interest on the part of a liberal arts faculty.

9. Fair criticism of Education courses should be accepted and every effort made to improve them in all possible ways. The mere fact that they are required will always make them subject to attack; but it is a mistake to adopt a defensive attitude. Emphasizing Item #8 again, we should keep pushing the State Department of Public Instruction for acceptance of our view of certification requirements.

10. If we adopt the three-term program, we should name our own credit hours for given courses; the accreditation agencies will probably accept our evaluation if we make a good case for it.

11. A student should major in whatever subject most deeply interests him, normally in a subject-matter field other than Education.

12. Combinations of teaching fields which now force a student to major in Education should be studied carefully, and called to the attention of the State Department of Public Instruction. The teacher preparation program on any liberal arts campus will be stronger and will attract more able people if students are free to elect their majors.

13. Students might be given credit for independent study in vacations, tested by rigorous examination. Such a program should not become an easy device to satisfy the requirements of professional education courses; the program should be adopted for the Department of Education only if several other departments are interested in experimenting with it also.

14. A five-year program with emphasis on subject-matter is in the cards, but our present emphasis should be on the four-year program.

15. We should consider the part we might play in fifth-year programs (30 hours beyond the A. B., mainly in subject matter). The question of graduate credit is a knotty problem.

16. We should have an interdepartmental committee on teacher training, which should be advisory and policy-making, but not administrative.

APPENDIX M, Part 1

Recommendations for the Fields of Economics and Business Administration

Joseph D. Coppock

The principal recommendation is that Franklin and Marshall strengthen its Department of Economics substantially and that it cease to offer business administration courses in the regular college curriculum. The basic reasons for this recommendation are (1) that a good liberal arts college should have good offerings in economics and (2) that a college cannot compete successfully with large university schools of business in the field of business administration. Excellent preparation for business careers can be obtained in the liberal arts program. Further study opportunities are available in specialized schools of business or in training programs organized by business firms.

A second recommendation is that Franklin and Marshall College establish, at least for the time being, a Department of Accounting. Although accounting is a vocational or professional field, Franklin and Marshall has strength in it which can be used effectively. Moreover, accounting is the one systematic subject in the general field of business administration. The offerings in accounting should be those required for preparation for the C. P. A. examinations. Courses outside of accounting generally required for the C. P. A., usually business law and business finance, should probably be offered in the Evening Division rather than in the College proper. The Department of Accounting should strive for excellence in accounting; it should not be a tent for a collection of business courses.

A third recommendation is that the Evening Division offerings in business administration, including accounting, be solid business subjects, but they could be varied from term to term in the light of the demand. With minor exceptions, regular college students should not be allowed to take business courses in the Evening Division. This is an important point. The Evening Division can render valuable educational services to the community, including the industries in the area. Franklin and Marshall is fortunate in having some experienced teachers of management, personnel relations, marketing, etc. who can form the nucleus for this part of the Evening Division faculty.

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The remainder of this report deals with some details with respect to proposed offerings in Economics. (There is no need for me to specify the courses in accounting appropriate for the Department of Accounting nor the courses appropriate for the Evening Division in the business administration area.) The following is a list of economics courses which might well be offered by a top-notch department of economics in a first-rate liberal arts college, according to contemporary thinking. The courses are shown in schedule form, as one-semester courses. The discussion indicates the content when it is not self-evident.

Economics Courses

First Semester	Second Semester
1. General Economics	2. Economic Analysis
3. Economic History	4. Accounting Concepts
5. The Business Enterprise	6. Industrial Organization
7. Labor Economics	8. Economic Statistics
9. Money and Banking	10. Capital Markets
11. Consumer-Social Economics	12. Public Finance
13. Comparative Economic Systems	14. International Economics
15. Economic Development	16. Economic Stability and Growth
17. (Intermediate) Economic Theory	18. History of Economic Thought
19. Individual or Group Studies	

1. General Economics. This course and Economic Analysis would cover the area treated by the familiar Principles of Economics, I and II. Different names are used for convenience, in case General Economics is used as a "general education" course to meet distribution requirements. Most teachers think the first economics course should emphasize description of the American economy and certain topics in "macro-economics." This course should be open to freshmen and should probably be offered each semester.

2. Economic Analysis. This would be elementary price and distribution analysis, generally given under the second semester of "principles." It could be taken concurrently with General Economics, but would normally follow it. These two courses should generally be considered prerequisites for all the other courses in economics.

3. Economic History. This should be a course dealing with selected topics in European and American economic history. This course could supplement very effectively the general European history course that is planned. It should contain some economic geography too. This course could be omitted if there were very strong history offerings, with ample economic content, which economics students generally took.

4. Accounting Concepts. This course would emphasize the understanding rather than the practice of accounting for the household, firm, government, national economy and international economy. It requires imaginative teaching.

5. The Business Enterprise. This should be an intensive examination of the development and present status of the business enterprise, particularly the corporation.

6. Industrial Organization. The content would be actual market structures and the problems of particular industries, e.g., steel, railroads, chemicals, mining, agriculture. I am recommending this course rather than Government Control of Business since the Department of Government gives a course in Government Regulation of Business. The approach would be different and the overlap small, however.

7. Labor Economics. This course should contain descriptive as well as analytical materials. This is an instance when a follow-up course in the Evening Division on Labor-Management Relations or such might be valuable.

8. Economic Statistics. This course would be much more valuable if it followed the course in Elementary Statistics offered by the Mathematics Department. It should involve numerous exercises in the collection, analysis, and interpretation of economic data that lend themselves to statistical treatment.

9. Money and Banking. This should be the standard course, with primary attention on the process of creating and destroying money and the means and policies for controlling it. The institutional features of the American money and banking system should be emphasized.

10. Capital Markets. This course would deal with the demand for, supply of and prices of investible funds. It would cover, within the framework of price-market analysis, much of the material included under corporation finance, financial institutions, investments and security markets.

11. Consumer-Social Economics. This course is needed in order to provide a critical appraisal of our economy. Some of the special topics

should be ways of improving consumer choices, waste, justice in the distribution of income and wealth, social security problems, charity, conservation of natural resources.

12. Public Finance. The main question in connection with this course is how much economic analysis to include if government majors are numerous. This should present no real problem if Course 2 (Economic Analysis) is insisted on as a prerequisite.

13. Comparative Economic Systems. This would be mainly the economic theories of communism and socialism plus the descriptions of the Soviet economy, perhaps other communist economies, and the controlled economies of Western Europe.

14. International Economics. The main problem here is the same as with Public Finance: how much economic analysis to include if many government majors are present. The subject can be treated satisfactorily in various ways.

15. Economic Development. This course would deal with the problems of underdeveloped countries. Since World War II an immense amount of attention has been given to this subject. Excellent materials are available now.

16. Economic Stability and Growth. This is probably the best capstone course in economics. It deals with "macro-economics," the Keynesian system and subsequent developments, national income analysis, business cycles, and contemporary policies for promoting stability and growth in the American economy and other developed economies.

17. (Intermediate) Economic Theory. This course should cover in detail the contemporary thinking in "micro-economics." Original contributions as well as textbooks should be used.

18. History of Economic Thought. This should include readings from the classics themselves as well as commentaries on them. This course is much more beneficial if it follows (Intermediate) Economic Theory.

19. Individual or Group Studies. This is mainly for juniors or seniors who want to do some research, intensive reading or problem-solving in a branch of economics in which they have already had some systematic training. This type of work should be undertaken only by better students.

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Now a few comments on some other features of a good economics curriculum. Required courses for concentrators or majors should be few in number. My recommendations are: General Economics, Economic Analysis, Money and Banking, and Economic Theory. Majors should be "advised," but definitely not required, to take a semester each of Accounting Concepts and Statistics. Students will see the relevance of these important tool subjects once their eyes are opened to the main branches of economics. These subjects could be taken at any time during the four years, but preferably after General Economics and Economic Analysis.

The only lower-college courses in the list (if you care about the distinction between lower-college and upper-college courses) are probably General Economics, Economic Analysis, Economic History, Accounting Concepts and Economic Statistics, but actually the differences in difficulty between these and the other courses can be exaggerated.

It is highly desirable, from both student and faculty points of view, to offer the courses regularly every year. The schedule above is designed to show a desirable distribution of the courses between the semesters, from the point of view of teaching load and useful sequences. General Economics and Economic Analysis ought to be offered each semester. Economic Statistics is put in the second semester so it can follow Elementary Statistics (Mathematics Department). Industrial Organization appropriately follows The Business Enterprise. Money and Banking is put in the first semester because it should generally precede Capital Markets, International Economics, Public Finance and Economic Stability and Growth, all of which are set up for the second semester. (Intermediate) Economic Theory should be kept in the first semester (usually taken in the senior year) because of its importance for the comprehensive examinations (including the Graduate Record Examinations) and its value as background for Economic Stability and Growth and History of Economic Thought.

Twenty-four standard semester hours is probably the minimum acceptable number for a major in economics; 36 is a plausible ceiling, but it is hard to hold majors to this limit. Your distribution requirements and good advising can help, though.

Various special interests can be accommodated with this array of offerings. "Pre-business" students, for example, could find plenty of courses in economics and other departments. No attempt should be made to establish rigid formal patterns of specialization. Individual advising of students is superior.

With respect to the "pre-business" programs of study, it is important that there be a pre-business faculty adviser who really understands the philosophy of "general" education for business careers. Also, in view of the different emphasis in the past at Franklin and Marshall, there should be a conscious effort to brief the admissions and the placement people on the College staff Some carefully written statements will help students, parents, alumni, employers and perhaps even board members to appreciate the change.

APPENDIX M, Part 2

SWARTHMORE COLLEGE
Swarthmore, Pennsylvania

SURVEY OF BUSINESS EDUCATION
Office of the Director

November 14, 1958

Professor W. N. Francis
Chairman, Curriculum Planning Committee
Franklin and Marshall College
Lancaster, Pennsylvania

Dear Professor Francis:

I have gone over all the material which you sent me about your proposed curriculum changes in economics and business administration and in general it seems to me that your group is definitely headed in the right direction. My comments are in the area of opinion and I would hesitate to press my suggestions very vigorously, but in general it seems to me you could go even further than you propose.

As I indicated in the preliminary chapters which I sent you from my Carnegie report, I have grave question whether undergraduates need to devote more than a third of their four years to the study of business and economic subjects. If this general principle holds for undergraduate business schools, it certainly seems to me that the proportion could be reduced to something less than this, perhaps 25% of the total, at liberal arts colleges. I am basing this recommendation not only on grounds of the need for broad, general education for the typical student but also on rather practical considerations that this is the best preparation for careers in business. There may be one or two types of business careers, notably in certain branches of accounting, actuarial science, etc., where this principle might not apply but for the great majority of students increasing emphasis is being placed on basic preparation in the three fundamental areas of science-mathematics, humanities and social sciences.

Turning to the business and economics area proper, it seems to me that every effort should be made to emphasize theoretical principles and ties with the foundation pre-business subjects.

Specifically this would mean five or six semester courses in economic principles, economic theory and one or two other major areas of economics and some advanced work beyond the elementary level in psychology, mathematics, literature or language and either history or political science. At the same time, the aspects of such subjects as finance, marketing and production management which emphasize these same principles and foundation subjects ought to make up the bulk of the student's work. As I indicated in the preliminary chapters I sent you, I am extremely doubtful about the content or worthwhileness of courses in transportation, insurance, and merchandising as well as in any great number of courses beyond three or four semester offerings in such fields as marketing, finance or production management.

I am of two minds about the desirability of a major in management at the undergraduate level although perhaps this is the only practical way of providing a certain amount of breadth and unity to the student's work. My own preference would be to treat management and business policy making as the main theme of the business student's entire interest rather than as a separate major for certain students.

As you may have noted, a chapter on business offerings at liberal arts schools is being prepared for our study but I am afraid it won't be ready for a month or so. Just as soon as I can get a copy, I will send you one.

I am extremely sorry that I was unable to meet with you this fall and I only hope that the material I have sent you will be of some interest. Let me know if there is anything further I can do that would be of any help. I am returning all the materials you sent me under separate cover except for the 1958-60 bulletin.

Cordially yours,

/signed/

Frank C. Pierson
Director

FCP/e

APPENDIX M, Part 3

Department of Business Administration January 29, 1959

THE CASE FOR A COLLEGIATE PROGRAM IN BUSINESS ADMINISTRATION

The basic argument in favor of such a program is the belief that it is the best way to prepare for a career in business — that it will enable a student to earn a better living for himself than he could earn by taking any other available course of study. An education which does this will enable him also to contribute more to the productivity of his firm and the economic system as a whole. Acceptance of the soundness of this argument leads students to take such courses and colleges to offer them.

We cannot prove the truth or falsity of this argument by any methods now known to social scientists. Studies of the backgrounds of business executives indicate that the chances for a successful career are related to many factors: education, intelligence, ambition, personality traits, social background, family connections, and others. To isolate the effect of education from these other factors is beyond our skill.

In the absence of objective measures of the best way to prepare for a business career, we are forced to rely upon the opinions of those who should be most competent to judge in this field — the business men themselves. If we examine the statements of business leaders on this question we can find almost any point of view expressed. Arguments in favor of a very general education and opposed to specific training are quite common, especially from top level executives. These men are talking about the qualities that make a vice-president outstanding, and at this level technical competence can be taken for granted. At lower levels, where most college graduates begin, one more frequently finds statements in favor of specific preparation in business subjects.

To know what business men really believe about education for business, however, we probably should study what they do, rather than what they say. This important distinction was made more than thirty years ago in a study published by the University of Chicago entitled Education for Business.

One important clue to the beliefs of business men in this matter is the policy they follow in hiring. Here the evidence seems overwhelming that the preference is for students who have had training in business subjects. The vast majority of those hired by the recruiters who come to this campus are students majoring in business administration. For some positions, employers will consider students who have majored in other subjects, but we have never observed an instance where an employer seeking management personnel indicated a preference for students from areas other than business administration. This experience is not peculiar to our college.

Two quite distinct reasons for this preference have been given by recruiters visiting our campus. They feel that some study of business subjects is an indication of a real interest in this field. Many of them tend to view with some suspicion a student who is planning to make his career in business, but who has taken no courses in that area. A second reason for preferring students who have had a basic core program in business is that such study enables them to do better work and advance faster in the training programs of the larger companies. A good student without college courses in business subjects can often succeed in these programs, but he is under a handicap in comparison with students of equal ability who have had courses in business administration.

Professor Coppock indicates on page 56 of his study that he believes an effective placement system can find adequate employment opportunities for the graduates of a pre-business program which does not include courses in business administration, but he also says he believes that the more strictly liberal arts colleges have not been particularly successful in this respect. In contrast with this uncertainty, Franklin and Marshall College has 66 firms now scheduled to visit the campus this spring, mostly to seek graduates in business administration — and the experience of other years would lead us to expect that another 20 or 25 firms will be added to this schedule before graduation time.

Another indication of what subjects business considers to be valuable for increasing the productivity of workers is the range of courses for which the companies will pay. Great diversity of policy will be found in this area. The Bell Telephone Company has attracted attention by sending a group of its most promising younger men in important positions to the University of Pennsylvania for a full year program strictly in the liberal arts. This is a most interesting experiment which may represent an important new departure in American business practice. But at the moment it is unique, and most companies are unwilling to pay for courses that are not quite directly related to the job the individual holds, or for which he is being definitely prepared. One of the best customers of our Evening School is the local RCA plant. This firm will generally pay for courses in business administration, accounting, elementary economics, mathematics, psychology, or English composition. But it is unwilling generally to pay for such courses as literature, philosophy, government, or even money and banking.

Still other evidence of what business leaders believe to be good preparation for business careers is indicated by what they will support with their contributions. Professor Coppock mentioned this as one of the factors that has led to the establishment of programs in business administration. It is also worth noting that Franklin and Marshall received a grant this year of $2500 from the General Electric Company for the improvement of instruction in business administration. We are one of only six liberal arts colleges to receive such a grant, and the award is based on the success our graduates have had with this firm over the past 35 years.

RELATION OF GRADUATE TO UNDERGRADUATE STUDY OF BUSINESS

Specific courses dealing with business subjects are taught at all levels in our educational system from junior high school to Ph. D. programs. A substantial duplication of subject matter is inevitable under such circumstances, and our opinion would be that a student planning a career in business generally would be well advised to confine his study of this field to the last two years of his schooling. A student planning to pursue a business administration course in college should follow an academic course in high school, and a student planning graduate work in business administration for two years should devote his undergraduate time to courses in general education.

But to say that undergraduate courses in business administration represent inferior preparation for graduate study is not to say that they represent inferior preparation for those who will go directly into business.

Furthermore, there is difference of opinion among the graduate schools as to what constitutes superior preparation for their work. Harvard puts all students through the same program, regardless of undergraduate study. Chicago exempts students who have had undergraduate courses in business from taking certain courses at the graduate level, and permits them to take other courses instead. Penn and Columbia on the other hand will accept some of our undergraduate courses as meeting part of their requirements for an M. B. A. degree. At the latter two schools the graduate business program requires two years for an undergraduate who has majored in liberal arts, and a year to a year and a half for a student who has majored in business as an undergraduate.

APPENDIX N

Enrollment in R. O. T. C.

The enrollment figures for the various courses in Air Science over the last five years appear in the table below. The arrows trace the progress of various groups through the program.

School Year	AS 11 12	AS 21 22	AS 31 32	AS 41 42
1954-55	115 → 94	101 → 62	31 → 24	30 → 28*
1955-56	182 → 116	51 → 17	18 → 18	21 → 19*
1956-57	200 → 121	54 → 27	11 → 9	20 → 13*
1957-58	191 → 100	43 → 27	13 → 11	7 → 6*
1958-59	294	33	18	8

(*)-Indicates the number of seniors commissioned.

It is clear from the figures that of 115 students who enrolled in the first course in the fall of 1954, only 11 went into the advanced (junior and senior) program, and only 6 of these went on to a commission. Of the class which entered in 1955, 182 began the program, 13 entered the advanced level, and no more than 8 can complete four years and be commissioned.

The primary reason for this attrition seems to be lack of interest in the program, though it should be pointed out that rather rigorous physical and officer qualification examinations keep some students out of the advanced program.

APPENDIX O

Some Comparisons

The following information from a study of 30 liberal arts college catalogs is presented as a matter of interest in connection with the curriculum study. Since all the tabulations require translation into some common unit the results obtained are not infallable. Furthermore, the classification of course requirements into certain categories is often subject to different interpretations. It is particularly impressive to note the very wide variation in the various requirements for graduation.

Types of bachelor's degrees offered:-

B.A.	30
B.S.	7
B.S. in Engineering	3
B.S. in Business	1
B.S. in Education	1
B. of Music	5

Requirements for the B.A. degree:-

Quantitative:	17 year units (136 hours)	Kenyon
	120 - 128 hours	20 colleges
	32 semester courses	Brown
	36 semester courses	2
	37 term courses	Dartmouth
	40 semester courses	3
Qualitative: (minima)	C average in all courses	10
	70% in 32 out of 40 semester courses	Colby
	70% or C in 3/4 of the courses	2
	70% average in all courses	Amherst
	70% in half the courses	Hamilton
	C- average	Bates
	1.8 average	Colgate
	1.75 average	Brown, Hobart
	C- in 20 of 34 semester courses	Bowdoin
	16 of 37 term courses with C+.	Dartmouth
	65% in freshman year, 70% in others	Haverford

General academic requirements:-

English Composition:	1 year	18
	1 semester	7
	None or proficiency	5

Foreign Language:	3 years	2
	2 years	21*
	1-1/2 years	3
	None	4

(*)- Includes 3 colleges on 4-course program

Science and Mathematics:

12-16 hrs. (or 2 year courses) 10% - 13% of work for degree	19
9-11 hrs. (or 3 sem., or 1-1/2 yr. courses) 8% - 9% of work for degree	8
6-8 hrs. (or 2 sem., or 1 yr. course) 5% - 7% of work for degree	3

Social Science:

18 hours	Colby
15-16 hrs. (or 4-5 sem. courses)	2
12-14 hours	16
9 hours	2
6-8 hours	8
None	1

Humanities:	24 hours	Bates
	18 hours	2
	15-16 hours	10
	12-14 hours	10
	9 hours	1
	4-6 hours	6
Public Speaking:	8 hours	2
	6 hours	1
	2-3 hours	4
	None	23

Physical Education requirement:-

4 years	Hobart
3 years	7
2 years	21
1 year	1

In some cases the time required in physical education is reduced by meeting standards of fitness or proficiency in sports.

Policies concerning the amount of time to be spent in concentration or the field of the major vary a great deal. In some cases the matter is left completely up to the various departments.

Normal minimum in concentration:

20 hours	Coe
24 hours	8
30 hours	5

Stated maximum in concentration:

48 hours at Antioch
45 hours at Beloit and Colby
40 hours at Kenyon and Oberlin
36 hours at Wesleyan

The percent of course requirements for the degree devoted to the attainment of certain skills and breadth (distribution) is distributed as follows:

30% - 39% at 13 colleges
40% - 46% at 9 colleges
50% at Oberlin, Hamilton, Wooster, Cornell College, Bates
52% at Denison
53% at Kenyon
56% at Brown

List of colleges surveyed

Allegheny
Amherst
Antioch
Bates
Beloit
Bowdoin
Brown
Bryn Mawr
Carleton
Coe
Colby
Colgate
Cornell College
Dartmouth
Denison
Earlham
Grinnell
Hamilton
Haverford
Hobart
Kenyon
Lafayette
Lawrence
Oberlin
Reed
Swarthmore
Wesleyan (Conn.)
Whittier
Williams
Wooster